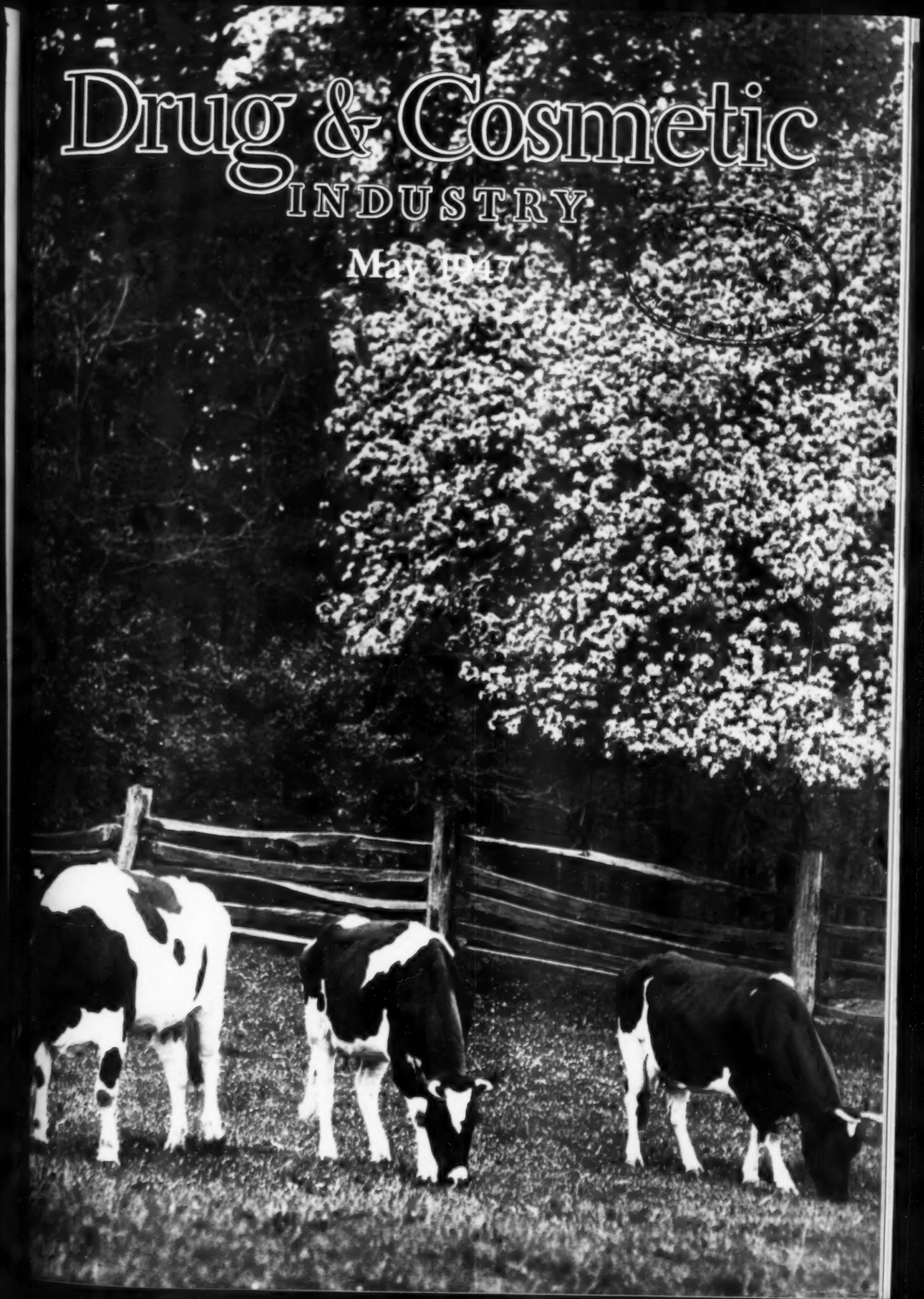
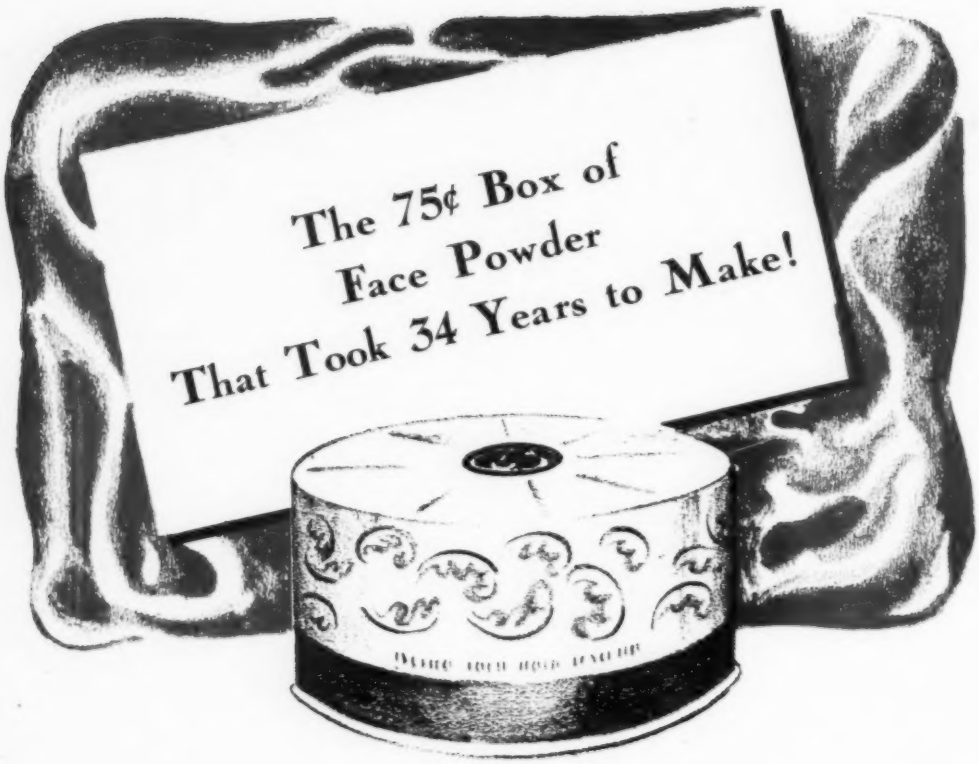
Drug & Cosmetic INDUSTRY

May 1947





For more than three decades, Industrial's chemists have conducted relentless research that has been shoulder-to-shoulder with the research going on among alert manufacturers. Face powder chemists are constantly giving their best thinking to the problem of supplying the finest, most adhesive powders to the ever-growing number of American women using this product.

Industrial's pure, high-white SNOWTOP USP is found in many leading face powders. It gives that fluffy-fine base so important to consumers.

Here at Industrial Chemical Sales, the "End Man", who is the ultimate user of *your* product, is of prime concern. To make the grade of precipitated calcium carbonate that will make *him* prefer *your* tooth paste . . . or the silkiest, lightest calcium carbonate that will win *her* vote for your face powder is what Industrial has been specializing in for over 30 years.

Remember . . . it's a *partnership* at Industrial Chemical Sales.

Your research and ours go hand-in-hand!

Your sample of SNOWTOP USP is waiting for you. Write today.

SNOW TOP

INDUSTRIAL CHEMICAL SALES

DIVISION WEST VIRGINIA PULP & PAPER COMPANY

230 PARK AVENUE
NEW YORK 17, N. Y.

35 E. WACKER DRIVE
CHICAGO 1, ILLINOIS

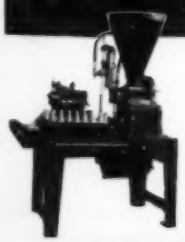
748 PUBLIC LEDGER BLDG.
PHILADELPHIA 6, PA.

844 LEADER BLDG.
CLEVELAND 14, OHIO

McKissick Memorial Library
JUN 7 1947
University of South Carolina

WHETHER IT'S SHOE CREAM or Shampoo—Tubes are the *Ideal Container!*

NO matter what the product may be, if it is of creamy or soft consistency, you'll find collapsible tubes are the *ideal* container. More and more products by increasing numbers of manufacturers are going to market in tubes. The consumer likes their light weight, compact sturdiness, ease of packing in anything from travelling bag, to handbag, to medicine chest. Manufacturers like their lightness and toughness which offer greater ease and economy in shipping, eliminating the breakage problem. When you specify tubes, make it a habit to "Specify *Sheffalloy*" (Sheffield Process) Tubes. A special method of melting, mixing and tempering the metals assures extra toughness . . an extra margin of safety. New England's craftsmanship is especially noteworthy, assuring fine uniform quality and outstanding tube decoration. You can save time and trouble by ordering tube cartons simultaneously with the tubes, from this one dependable source . . the only tube manufacturer offering this service to you. Don't delay. Write or wire our nearest office today for prices, samples, suggestions. No obligation, of course.



If your tube filling facilities are inadequate, ship us your bulk product. We'll package it for you in tubes, jars or tins, ready for distribution. This is only ONE of the EXTRA services available at NEW ENGLAND!

Sheffalloy
TRADE MARK REGISTERED
SHEFFIELD PROCESS
TUBES

NEW ENGLAND COLLAPSIBLE TUBE CO.

3132 S. CANAL ST., CHICAGO 16 • NEW LONDON, CONN. • W. K. SHEFFIELD, V. P., 500 FIFTH AVE., NEW YORK 18
T. C. SHEFFIELD, 7024 MELROSE AVE., LOS ANGELES 38 • C. W. MILLER, 151 COLE ST., SAN FRANCISCO 17
EXPORT DEPT: 500 FIFTH AVE., NEW YORK 18, CABLE "DENTIFRICE", NEW YORK

Drug & Cosmetic INDUSTRY

MAY 1947

CONTENTS

KEEPING POSTED	617
A WEAKNESS IN THE FOOD, DRUG AND COSMETIC ACT	622
COOPERATIVE ADVERTISING	624
MODERN CREATIVE MERCHANDISING	626
MODERN OINTMENT BASES	629
AMINO ACIDS FOR MEDICINAL USES	632
READJUSTMENT IN THE COSMETIC INDUSTRY	634
AMPUL PROBLEMS	636
PACKAGING AND SELLING	639
NEWS	657
PRODUCTION FORUM	669
YOUR TRADE-MARK RECORD	681
PATENT TRENDS AND THOUGHTS	684
COMPOUNDER'S CORNER	688
ADVANCING THERAPY	692
PERFUMER'S SHELF	696
PURCHASING DEPARTMENT	699
INDUSTRY'S BOOKS	709

The Drug and Cosmetic Industry is published monthly by Drug Markets, Inc., Frazer V. Sinclair, President and Treasurer; Thomas R. Farrell, Vice-president and Secretary. Publication Address, 28 Renne Ave., Pittsfield, Mass., U. S. A. Editorial and General Office, 101 West 31st St., New York, 1, N. Y., U. S. A.

Business Manager, Frazer V. Sinclair; Advertising Representatives, P. W. Alexander, Walter M. Brauneiss, C. R. Keeley, Dwight H. Early, 100 No. LaSalle St., Chicago 2; Production Manager, Katherine Hyde; Circulation Manager, Harry G. Kelbly.

Subscription price—$3.00 a year, in advance, Foreign Countries, $5.00. Single copies, 35c; Back issues 50c. Entered as Second Class Matter, January 1, 1928, at the Post Office at Pittsfield, Mass., under the Act of March 3, 1879.

Member of Audit Bureau of Circulations.

Contents Copyrighted 1947 by Drug Markets, Inc.

Printed by Sun Printing Corp., Pittsfield, Mass., U. S. A.

THOMAS R. FARRELL, Editor

ELMER SHEETS, Managing Editor

FRANCIS CHILSON, Production Consultant

M. A. LESSER, Technical Editor

HARRY G. KELBLY, Raw Material Editor

HILDA C. McCOLLOM, Art Director

What's NEW at NYQ

Always Top Quality

Scarcely a month goes by that does not witness the addition of some new modern equipment for the improvement in production of N.Y.Q. chemicals.

That's just one reason why you can be sure that chemicals bearing the N.Y.Q. label are always top quality.

Specify N.Y.Q. on your orders.

NYQ

GENERAL OFFICES
99-117 North Eleventh St.
Brooklyn 11, N. Y.

ST. LOUIS DEPOT
915 Market Street
St. Louis 1, Mo.

Symbol of Quality

BE CONFIDENT OF HIGHEST QUALITY BY USING N.Y.Q. CHEMICALS

Oxzyn

SERVES THE TRADE EXCLUSIVELY

WITH QUALITY

LIPSTICKS

CREAM ROUGES

EYEBROW PENCILS

CREAMS

COMPACTS | ROUGE | POWDER | MAKEUP

EYE SHADOWS

WATERPROOF MASCARAS

FACE POWDERS

WE ALSO MANUFACTURE POWDER PUFFS, VANITY PUFFS, LOOSE SIFTER POWDER DEVICES AND SPECIAL LAMSDOWNE PUFFS

PRODUCTS MADE IN CONFORMITY WITH THE PURE FOOD, DRUG AND COSMETIC ACT

PRODUCTS LIABILITY INSURANCE CARRIED

OXZYN COMPANY

NEW JERSEY OFFICE
ONE PLEASANT AVENUE
CLIFTON

MANUFACTURING
Cosmetics of Quality
SINCE 1877

CANADIAN OFFICE
54 OSLER AVENUE
WEST TORONTO, ONTARIO

General Chemical Research Presents

BASIC CHEMICALS

GENERAL CHEMICAL COMPANY

FOR AMERICAN INDUSTRY

Sulfan*

Brands of STABILIZED SULFURIC ANHYDRIDE

General Chemical Company—America's pioneer with the Contact Process for manufacture of high strength sulfuric acid and oleum—makes another major contribution to Basic Chemicals for American Industry with SULFAN . . . Anhydride of Sulfuric Acid.

By perfecting new methods of stabilizing Sulfur Trioxide, General Chemical Research takes an invaluable chemical tool off the shelf of laboratory curiosities and brings it to the Process Industries as a chemical of commerce for use in a host of ways.

General Chemical offers SULFAN in three chemically equivalent forms:

Sulfan 'A' Partially Stabilized, melting at approx. 35°C;

Sulfan 'B' Completely Stabilized, melting at approx. 17°C; and

Sulfan 'C' Unstabilized.

Experimental samples and further technical information are available on request from General Chemical Company, Research and Development Division, 40 Rector Street, New York 6, N. Y.

Some Potential Uses

1. For fortification of spent oleum, making possible a ready supply of any strength oleum.
2. In benzenoid sulfonations for elimination of mixed sulfonates: meta- only or ortho- and para- derivatives only are formed.
3. For di- and poly-sulfonations of aryl compounds.
4. For direct sulfonation of aliphatics.
5. For sulfonations in the presence of a solvent, thus eliminating the removal of H_2SO_4 necessary when oleum is the agent.
6. For formation of addition compounds with amines, valuable in organic synthesis.

Sulfuric Anhydride exists in three chemically equivalent physical modifications as indicated by data below. General Chemical's stabilized product is almost entirely Gamma-Form and its partially stabilized product is largely Beta-Form.

PROPERTY	GAMMA-FORM	BETA-FORM	ALPHA-FORM
Description	Ice-Like	Asbestos-Like	Asbestos-Like
Equilibrium			
Melting Point (°C):	16.8	32.5	62.3
Density (20°C)	1.9255	—	—
Sp. Ht. (cals/gm) (20°C)	0.77	—	—
Ht. of Fusion (cals/mol)	1,800	2,900	6,200
Ht. of Sublimation (cals/mol)	11,900	13,000	16,300
Ht. of Dilution (cals/mol)	40,340	—	—
Vapor Pressure (mm.)			
0°C	45	32	5.8
25	433	344	73
50	950	950	650
75	3,000	3,000	3,000

GENERAL CHEMICAL COMPANY

40 RECTOR STREET, NEW YORK 6, N. Y.

Sales and Technical Service Offices in principal cities from coast to coast

*Trade Mark, General Chemical Company

perfume dreams come true

Your ideal can be achieved **ask vA-H**

Manufacturers of basic perfume materials

van AMERINGEN-HAEBLER, Inc.
315 Fourth Avenue, N. Y. 10

Sylviola

Exotically oriental in mood, this new Dow Aromatic Specialty contributes a note of precious woods and orris violet for modern oriental effects. Exceptionally versatile, Sylviola will serve a wide and varied range of uses. It conforms, of course, to Dow's exacting standards of odor fidelity and uniformity. A request on your company letterhead will bring working sample and complete details.

THE DOW CHEMICAL COMPANY • MIDLAND, MICHIGAN

50th Anniversary 1897-1947

DOW

Aromatics

INDISPENSABLE TO THE CREATIVE PERFUMER

Let CALCO's large-capacity plants supply your Bulk Pharmaceuticals

CALCO's Bulk Pharmaceuticals

SULFADIAZINE U.S.P.
(powder or micro crystal)
. . . the Sulfa drug of choice
Sodium Sulfadiazine U.S.P.
Sulfamerazine U.S.P.
Sodium Sulfamerazine U.S.P.
Sulfanilamide U.S.P.
(powder, crystal and micro crystal)
Sulfathiazole U.S.P.
(powder, crystal and micro crystal)
Sodium Sulfathiazole U.S.P.
Sulfapyridine N.F.
Sodium Sulfapyridine
Aminoacetic Acid N.F.
Calcium Pantothenate (Dextro)
Choline Chloride
Choline Dihydrogen Citrate
Cinchophen N.F.
(and Sodium Salt)
Neocinchophen U.S.P.
Mandelic Acid N.F.
Calcium Mandelate U.S.P.
Menadione U.S.P.
Methylene Blue U.S.P.
(powder or crystals)
Nicotinic Acid U.S.P.
Nicotinamide U.S.P.
Saligenin
Thiouracil
Phenothiazine N.F.
(Regular and Drench grades for Veterinary use)
Certified Colors for Pharmaceutical and Cosmetic Use

CALCO'S capacity to manufacture bulk pharmaceuticals in large quantity is one reason why you should depend upon this company as your source of supply for present and future needs.

In CALCO'S extensive plants covering nearly 550 acres and employing nearly 5,000 trained technicians and operators every step from laboratories through to finished big-scale production is rigorously checked to insure an absolute uniform standard of quality.

Why not call upon CALCO now for the bulk pharmaceuticals listed on this page?

★ *Precise and complete analytical control*

★ *Technical bulletins available*

★ *A technical service ready to assist in application problems.*

Represented in Canada by Calco Chemical Division
North American Cyanamid, Limited
P. O. Box 10, St. Lambert, Montreal 23, P. Q.
Royal Bank Bldg., Toronto 1, Ontario

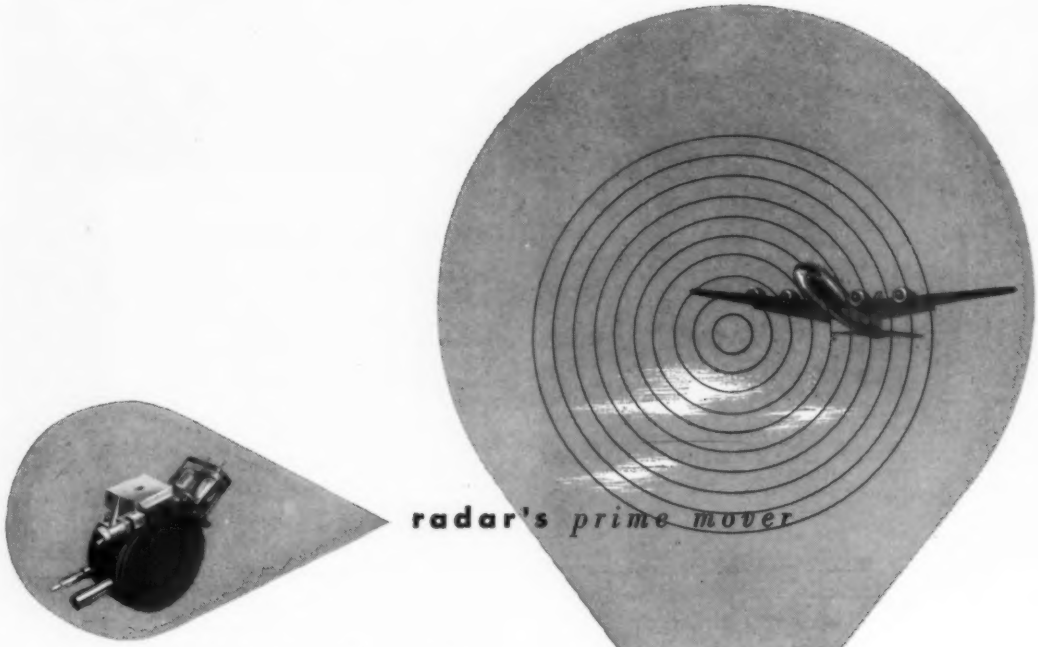
Pharmaceutical Department

Calco

REG. U. S. PAT. OFF.

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
Bound Brook, New Jersey

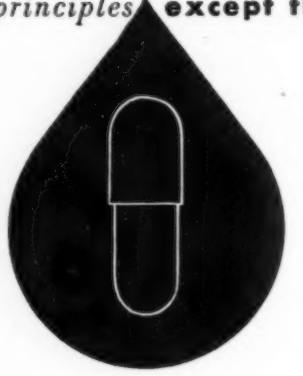
dynamic **medicinals** *for a dynamic age*



radar's *prime mover*

Perfected during the war, the Magnetron no longer even looks like a radio tube. From a dynamic mass of metal and glass smaller than a man's closed fist surges power far greater than that of any broadcasting station. The Magnetron is the prime mover of radar and the entire electronics industry.

yet there is nothing new about its principles **except their application**



vitamins

Owners of private formulae for vitamins approve Strong Cobb's dynamic manufacturing which produces medicaments of elegance to obviate customer resistance. Unpleasant taste and odor are removed. The resulting vitamin passes the critique of the most discriminating.

Liquids, tablets, capsules and creams have tomorrow's precision control engineered into them by Strong Cobb's dynamic manufacture.

Whether you are considering immediate or future production our technical sales director will be pleased to talk over your manufacturing problems with you.

Strong Cobb & Company, Inc.

Strong Cobb Division of Standard Brands Incorporated
Cleveland 4, Ohio

"ALL FOR THE LOVE OF A LADY..."

SHEER DEVOTION TO MADAM CONSUMER makes the business world go round! Countless competitors vie for milady's favor . . . and very often the basis of her choice is the superior taste or scent-appeal of the product!

So whatever you have to sell her . . . toothpaste or toiletries, lipsticks or hair lacquer, pills or pest killers . . remember *her* devotion may be wooed and won through the medium of FLAVOR AND PERFUME OILS . . . for this is the alchemy that endows countless products with the magic of individualized flavor or odor personality.

As one of the world's great suppliers of Essential Oils, Flavoring and Perfuming Materials, MAGNUS, MABEE & REYNARD, INC., can be of important service to you. Let us show you how distinctive odor or flavor can add sales-appeal to your product, old or new. The facilities of our laboratories and more than 50 years of specialized experience are available to you without obligation.

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895 . . . ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK 13, N. Y. • 221 NORTH LASALLE STREET, CHICAGO 1, ILL.

Builders of PRODUCT PREFERENCE through QUALITY ESSENTIAL OILS, PERFUMING MATERIALS and CONCENTRATED FLAVORS Since 1895

Los Angeles: Braun Corp. • Seattle, Portland, Spokane: Van Waters & Rogers, Inc. • San Francisco: Braun-Knecht-Heimann Co. • Toronto, Can.: Richardson Agencies, Ltd.

Beauty without Disguise

ARLACEL EMULSIFIERS . . . *A new step to color-free perfection . . . to intensify product elegance for the chemist*

Why spoil the distinctive elegance of your product with an emulsifier that has to be masked? ARLACELS are the lightest-colored emulsifiers Atlas has ever developed—far less likely to intrude on the natural appearance of your formula than general-purpose emulsifiers. What's more, they have a clean, bland, pleasant odor that won't upset delicate perfume balance.

Especially developed for cosmetics, ARLACELS are non-ionic and make emulsions that are stable to freezing and to electrolytes. They are dispersible in water, soluble in most organic solvents, and almost universally compatible with materials to be emulsified.

There is nothing experimental about ARLACELS. Products of the same unending research that developed Atlas Spans and Tweens, they are ready *now* to make important improvements in your formulas for topical application. You are invited to write us for more details.

ATLAS

INDUSTRIAL CHEMICALS DEPARTMENT

CHEMICALS ATLAS EXPLOSIVES

ARLACEL® – Span and Tween – Reg. U. S. Pat. Off.

ATLAS POWDER COMPANY, WILMINGTON 99, DELAWARE • OFFICES IN PRINCIPAL CITIES • CABLE ADDRESS • ATPOWCO

PRESENTATIONS

•

RODEO

NOCTURNAL

for subtle, sophisticated fragrances

HYACINTH ABSOLUTE

limited quantities again available

•

POLAK'S FRUTAL WORKS INC.

[illegible] 25th Street Long Island City 1, New York

LILY-OF-THE-VALLEY 110-A . . . An oil with the exceptionally fine and true odor of the flower, worthy of use in outstanding perfumes. Here is a fragrance that draws generously from the costly treasures on the shelves of the perfumer . . . an oil with a lasting quality rare in so light an odor.

LILY-OF-THE-VALLEY 107-A . . . An oil that will blend well with all types of cosmetics, this medium-priced material is particularly adaptable to the light character of a toilet water. Its freshness lingers like the redolence of the garden flower for which it is named.

LILY-OF-THE-VALLEY 102-A . . . To enhance the quality and sales appeal of many types of cosmetic products . . . to obtain a floral fragrance with inexpensive materials . . . for use in soap, where it is long-lasting and stable.

INSPIRATION FROM AN OLD FAVORITE

Lily-of-the Valley Perfume Oils

BY GIVAUDAN

Long a favorite among flowers, the lily-of-the-valley has the sweet and fresh fragrance that makes May the delightful month of springtime . . . an elusive note that is captured by Givaudan's skillful perfumers.

Manufacturers of perfumes and cosmetics seeking the floral character of the French muguet can receive aid and inspiration from these carefully blended perfume oils and bases.

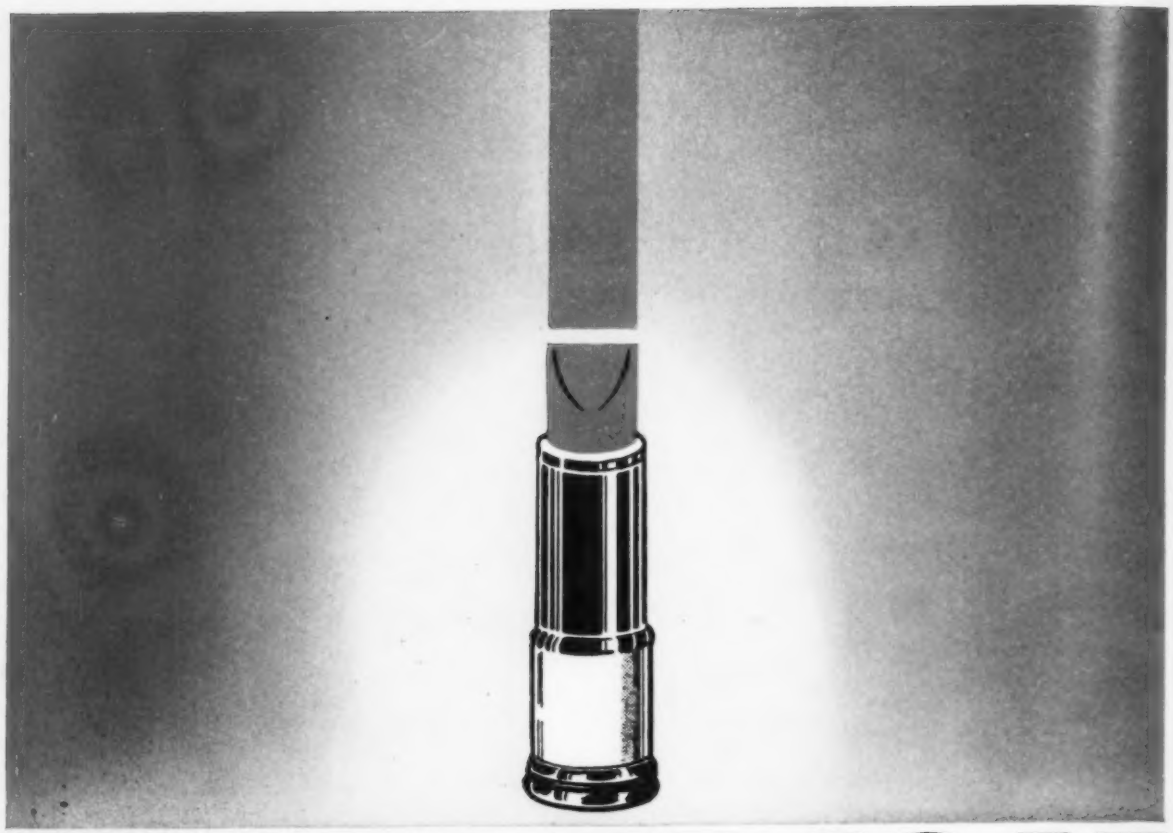
Quotations and samples furnished upon request.

"TRADITIONALLY...PROGRESSIVELY...DEPENDABLY GIVAUDAN"

Givaudan-Delawanna, Inc.

330 WEST 42nd STREET, NEW YORK 18, N. Y.

BRANCHES: Philadelphia • Los Angeles • Cincinnati • Detroit • Chicago • Seattle • Montreal • Toronto



HELFRICH

HEADQUARTERS FOR
ONE OR A COMPLETE LINE OF
QUALITY TIME TESTED
PRIVATE LABEL COSMETICS

HELFRICH PRIVATE LABEL COSMETICS

Rouge	Cake Make-up
Cream Rouge	Mascaras
Lipsticks	Perfumes
Eye Shadow	Colognes
Face Powder	Face Creams
Sachets	Lotions
Etc.	Etc.

WHAT HELFRICH PROMISES.....HELFRICH DOES

• HELFRICH LABORATORIES, INC., 737-9 W. JACKSON BLVD., CHICAGO • HELFRICH LABORATORIES OF CANADA, LTD., 690 KING ST., WEST, TORONTO, ONT.
• HELFRICH LABORATORIES OF N. Y., INC., 151-163 WEST 26TH ST., NEW YORK • CABLE ADDRESS: HELFLABS, NEW YORK CHICAGO . . . TORONTO

HELFRICH Laboratories

schimmel

Heliocrete

A Schimmel Specialty

• • •

Four times as strong as Heliotropin and so much closer to the natural odor. An economical product, widely used, stable against alkali, effective as a fixative and without chemical odor. Details on request.

•

• • •

schimmel & co., inc.

601 West 26th Street, New York, 1, N. Y.

CHICAGO – CINCINNATI – ST. LOUIS – DALLAS – LOS ANGELES – SAN FRANCISCO

ALCOLAN

ABSORPTION BASE

for better

CREAMS

OINTMENTS

LIPSTICKS

An excellent hydrophilic base containing cholesterol, other sterols and Lanolin Alcohols that closely resemble those found in the fatty secretions of human skin. The cholesterol in Alcolan is in a fatty form more absorbable because of its ready miscibility with the secretions of the sebaceous glands. Lengthy complicated formulation is not necessary to obtain good results. Water alone, added to Alcolan produces a lustrous white cream of rich consistency possessing excellent emollient properties. Brilliant white creams with remarkably smooth texture and elegant cosmetic effect may be produced with Alcolan. These creams spread easily and will not dry out, cake or harden.

WRITE FOR DESCRIPTIVE LITERATURE

ROWAG

ROBINSON WAGNER COMPANY INC.

LANOLINE PRODUCTS (ROWAG) WAXES & CHEMICALS

110 EAST 42nd STREET, NEW YORK 17, N. Y.

Cable Address: "Robinwag" · Plant Mamaroneck, N. Y.

INDOLINE

Not a substitute
for INDOL but a
product superior
in

LASTING QUALITY
SWEETNESS and
PERFUME VALUE

Please Write for Free Sample

Norda

ESSENTIAL OIL AND CHEMICAL COMPANY, INC.

NEW YORK OFFICE
601 WEST 26TH STREET

CHICAGO: 325 W. HURON STREET
LOS ANGELES: 2800 E. 11TH STREET
ST. LOUIS: 1123 WASHINGTON AVE.
FRANCE: PLACE VENDOME, 8, PARIS
ST. PAUL: 253 E. 4TH STREET
HAVANA, CUBA: AMARGURA 160
CANADA: 119 ADELAIDE ST., W. TORONTO
135 COMMISSIONERS ST., WEST, MONTREAL
ENGLAND: 17 CREECHURCH LANE, LEADENHALL ST., LONDON, E. C. 3

CREATORS OF *the Essence of Elegance*

NAUGATUCK AROMATICS

DIVISION OF UNITED STATES RUBBER COMPANY

254 FOURTH AVENUE, NEW YORK 10, N. Y. • 14 NORTH FRANKLIN ST., CHICAGO 6, ILL.

NAUGATUCK CHEMICALS, LTD., ELMIRA, ONTARIO, CANADA

Sole distributors for:

BRUNO COURT, S. A., Grasse, France • C. A. P. P., Casablanca, Morocco

NEW PERFUMES AND FRAGRANCES COMPOUNDED FROM 605 SYNTHETIC A
NATURAL AROMATICS OF HIGHEST REFINEMENT FROM ALL OVER THE WOR

Kolmar COSMETICS Coast TO Coast

★ Laboratories and plants
● Sales offices

The opening of the new Hollywood Kolmar plant gives us five strategically-located plants in the United States and one in Canada. The result is a valuable saving of time and carrying charges in the delivery of your product . . . and should one of our plants be temporarily incapacitated for any reason, production of your cosmetics would immediately be continued at another Kolmar plant. No other one private label cosmetic manufacturer can assure you of this speedy, economical, country-wide service.

Each one of our plants affords the most modern production facilities and the same high type of technical skill necessary to produce scientifically-tested formulas . . . the kind that has won recognition for Kolmar as the world's largest exclusive producers of private label cosmetics.

KOLMAR products include Lip Stick, Dry Rouge, Loose Face Powder, Cake Make-Up, Foundation Creams, Liquid Make-Up, Eye Shadow, Mascara, Lotions, Colognes, Perfumes and other cosmetics. We are also known as the world's largest producers of Vanity Puffs.

REPRESENTATIVES: M. C. BOYD, DOUGLAS HAGGERTY, THOMAS LA PRELLE, EMPIRE STATE BUILDING, ROOM 605, NEW YORK, N. Y.; WARREN M. CURRY, 350 NELSON STREET, S. W., ATLANTA 3, GA.; NORMAN KOLE, 419 MERCHANDISE MART, CHICAGO, ILL.; J. C. WEILER, K. A. HENRY, 8003 FORSYTHE BLVD., ST. LOUIS 5, MO.; R. F. G. BYINGTON, 1250 N. WESTERN AVE., LOS ANGELES, CALIF.; RICHARD F. SPICKER, 419 WEST FIFTH ST., CINCINNATI, OHIO.

Kolmar LABORATORIES

PRIVATE LABEL COSMETICS EXCLUSIVELY

PARASEPTS®

Neutral Esters of Parahydroxybenzoic Acid

Preservatives. **For products containing gums, mucilages, glue, carbohydrates, fats and oils, and other products subject to deterioration through mold growth, fungus formation, or yeast and bacterial action.**

Under certain conditions Parasepts can be used to provide antiseptic properties in lotions, creams, and powders.

Write to us for information on the application of Parasepts to your field of manufacture.

PARASEPTS AVAILABLE:

Methyl Parasept
Ethyl Parasept
Propyl Parasept
Butyl Parasept
Benzyl Parasept

SUPPLIED: 5-lb. cartons; 25-lb. and 100-lb. fiber drums.

HEYDEN CHEMICAL CORPORATION
393 Seventh Ave., — New York 1, N. Y.
CHICAGO OFFICE, 20 North Wacker Drive
PHILADELPHIA OFFICE, 1700 Walnut Street

New! Specially Developed

Perfume oils *for* Cream Shampoos

THE fragrance in your cream shampoo is an important factor in its popularity. The fragrance must be delicate, long-lasting and appeal to women of all ages and types. Our Perfumer-Chemists have prepared a new Crema Line of specially developed perfume oils for cream shampoos. These new oils blend perfectly with cream shampoos, impart a lasting fragrance and are available in 10 different odors, all of which have proved their consumer acceptance.

Send us a sample of your own cream shampoo. Our Perfumer-Chemists will be glad to suggest the Crema Perfume Oil which will give it greatest sales appeal. Or—if you wish to make your own experiments—we'll be glad to send you a sample of the fragrance you prefer.

• • •

The Crema Line of perfume oils for cream shampoos are available in the following fragrances:

CREMA ROSE · CREMA PINE · CREMA APPLE BLOSSOM · CREMA LAVENDER · CREMA GARDENIA
CREMA HONEYSUCKLE · CREMA JASMIN · CREMA EAU DE COLOGNE · CREMA CARNATION · CREMA BOUQUET

Aromatic Products Inc.

15 East 30th Street, New York 16, N. Y.

ATLANTA · CHICAGO · DALLAS · PITTSBURGH · MEMPHIS · SAN FRANCISCO · LOS ANGELES

A *Reflection* OF FINE QUALITY

Cosmetics, because of their intimate use, call for the finest and smoothest ingredients. Discriminating women insist upon materials pleasant to the touch, as well as flattering to the appearance.

Cosmetic manufacturers know that this fine quality can be obtained only through the consistent use of raw materials that are uniformly reliable, with a background of quality production.

Merck chemicals for cosmetic manufacture are produced under the same rigid standards of purity and uniformity that make Merck products the choice of physicians and pharmacists throughout the world.

We invite you to consult us regarding your problems and requirements.

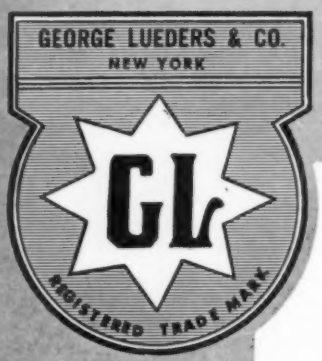
MERCK FINE CHEMICALS

for the Cosmetic Industry

MERCK & CO., Inc. *Manufacturing Chemists* RAHWAY, N. J.

New York, N. Y. • Philadelphia, Pa. • St. Louis, Mo. • Chicago, Ill.
Elkton, Va. • Los Angeles, Calif.

In Canada: MERCK & CO., Ltd., Montreal • Toronto • Valleyfield



AMERICAN DISTILLED OILS

PRODUCED AT OUR BROOKLYN FACTORY

CLOVE		OPOPONAX
NUTMEG	CELERY	PIMENTO
ORRIS LIQUID, CONC.		OLIBANUM

also

LINALOOL CITRAL EUGENOL

RESIN LIQUIDS

OLIBANUM	ORRIS	BALSAM PERU
LABDANUM		BALSAM TOLU
OPOPONAX	STYRAX	TONKA

Essential Oils • Aromatic Chemicals • Perfume Materials • Colors

GEORGE LUEDERS & CO

427 WASHINGTON STREET, NEW YORK 13, N.Y.

CHICAGO • SAN FRANCISCO • MONTREAL • ST. LOUIS • PHILADELPHIA • LOS ANGELES • TORONTO

ESTABLISHED 1885

HENRI ROBERT INC.

News of Importance to AMERICAN PERFUMERS
Who Want Success Through Quality

HENRI ROBERT Inc.

Distinctive American raw materials for perfume . . . in the French tradition

39 WEST 60TH ST., NEW YORK 23, N. Y.

CABLE ADDRESS HENROBERT TELEPHONE: CIRCLE 5-8521 CODES: A.B.C. 5TH & 6TH EDITION

announces:

He is now the exclusive representative in the Western Hemisphere for:

SYNAROME
S A R L au Capital de 1 000 000 de Francs

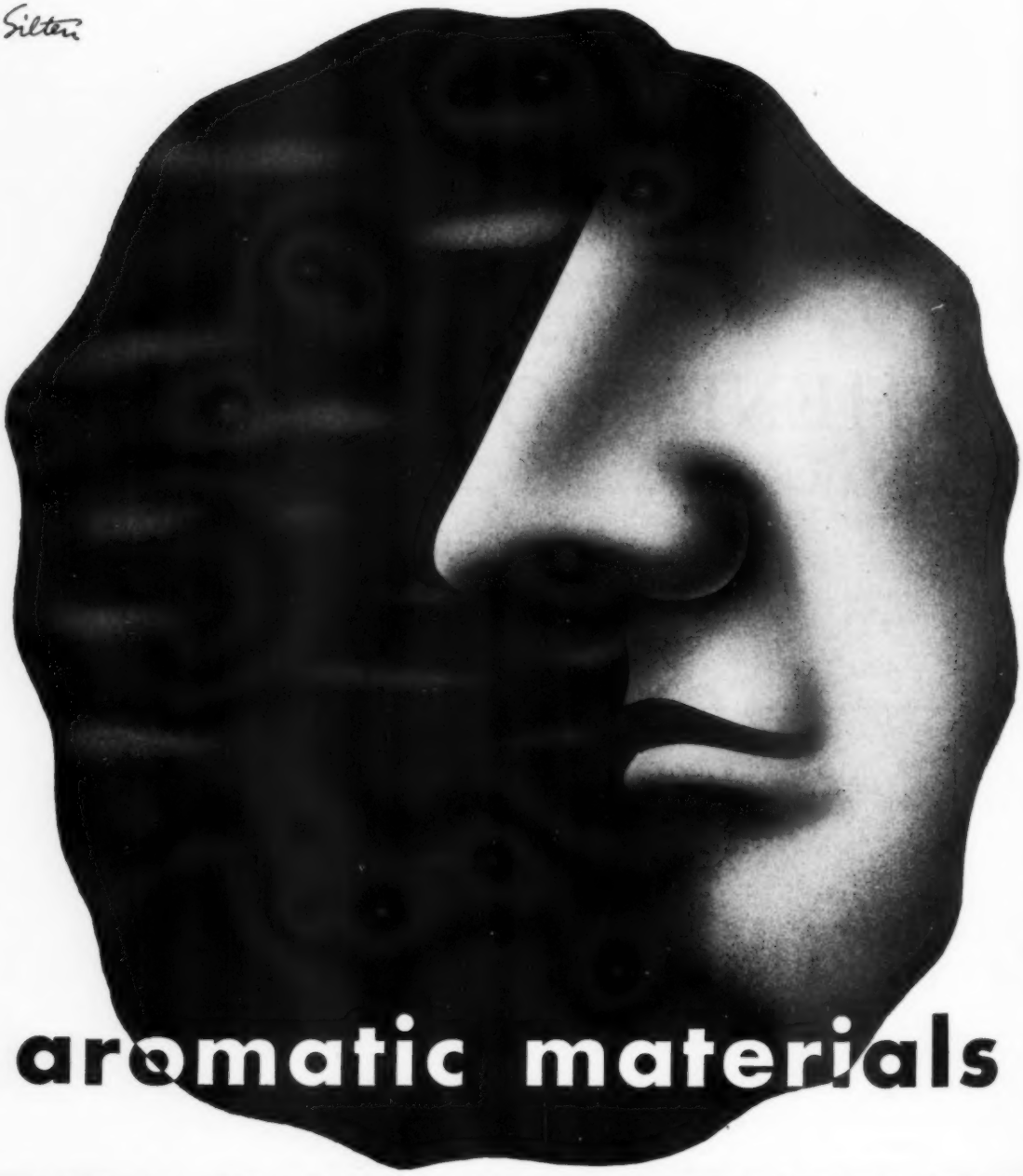
LABORATOIRES SYNAROME
Asnieres (Seine)
CREATOR OF AMBRAROME, CARDAMINE AND OTHER VERY MODERN SPECIALTIES USED IN MANY LEADING SUCCESSES DURING THE PAST DECADE

LES FILS DE
JOSEPH ROBERT
91 RUE DE L'UNIVERSITE
PARIS VII
SPECIALISTS IN FLORAL PRODUCTS
FROM GRASSE
ESSENTIAL OILS AND ABSOLUTES OF EXCEPTIONAL QUALITY MANUFACTURED FROM THE PRINCIPLES ESTABLISHED IN 1890 BY JOSEPH ROBERT

HENRI L. ROBERT
CREATEUR DE PARFUMS

WILL PERSONALLY HELP YOU UTILIZE THESE THREE SOURCES OF OUTSTANDING RAW MATERIAL AND ENABLE YOU TO DEVELOP MODERN PERFUMES OF BEST QUALITY AND HIGHEST SALES APPEAL.

Silten



aromatic materials

POLAK & SCHWARZ

667 WASHINGTON ST., NEW YORK 14, N. Y.

ZAANDAM, PARIS, LONDON, RIO DE JANEIRO, BUENOS AIRES

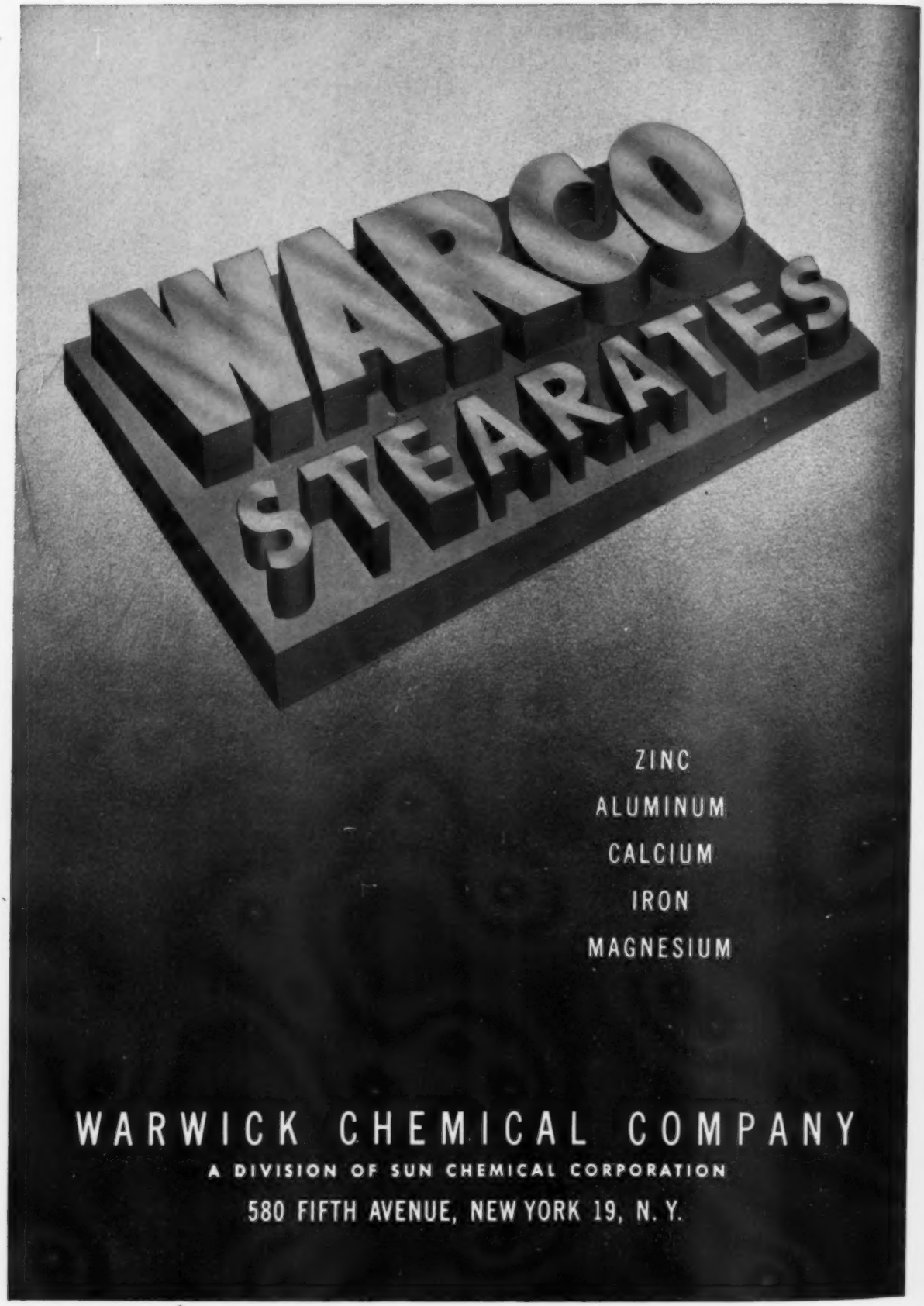
Monsanto pharmaceuticals

- Benzyl Benzoate
- Saccharin, U.S.P.
- Glycerophosphates
- Sodium Benzoate, U.S.P.
- Sodium Phosphate, Di
- Methyl Salicylate, U.S.P.
- Ferric Phosphates
- Chloral Hydrate, U.S.P.
- Caffeine, U.S.P.
- Phenol, U.S.P.
- Benzoic Acid, U.S.P.
- Magnesium Phosphates
- Salicylic Acid, U.S.P.
- Phenolphthalein, U.S.P.
- Chloramine-T, U.S.P.
- Phosphoric Acid
- Calcium Phosphate, Di
- Acetyl Salicylic Acid (Aspirin)
- Acetophenetidin, U.S.P.
- Potassium Ammonium Phosphate
- Sodium Salicylate, U.S.P.
- Sulfanilamide, U.S.P.
- Acetanilid, U.S.P.
- Salol (Phenyl Salicylate)

SULFANILAMIDE, U.S.P., is a Monsanto pharmaceutical product of recognized quality and high purity—the result of exercising every known precaution in the many stages of research, testing and control to which all Monsanto pharmaceuticals are subjected . . . Technical service available . . . Contact the nearest Monsanto District Sales Office or write MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 S. Second Street, St. Louis 4, Mo. . . . District Sales Offices: New York, Chicago, Cleveland, Boston, Detroit, Charlotte, Cincinnati, Birmingham, Los Angeles, San Francisco, Seattle. In Canada: Monsanto (Canada) Ltd., Montreal.

MONSANTO
CHEMICALS — PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND


WARCO
STEARATES
ZINC
ALUMINUM
CALCIUM
IRON
MAGNESIUM
WARWICK CHEMICAL COMPANY
A DIVISION OF SUN CHEMICAL CORPORATION
580 FIFTH AVENUE, NEW YORK 19, N. Y.

THE WORLD'S FINEST ORANGE OIL

Made exclusively from oranges from the Sunkist Groves of California.

Exchange Oil of Orange gives you more *real orange flavor*, drop for drop or pound for pound, than any other orange oil.

Give it all your tests for *quality, uniformity* and *strength*. Then you'll buy Exchange Brand.

Distributed in the United States exclusively by
FRITZSCHE BROTHERS, INC.
76 Ninth Avenue, New York 11, N. Y.
DODGE & OLCOTT, INC.
180 Varick Street, New York 14, N. Y.
Distributors for:
CALIFORNIA FRUIT GROWERS EXCHANGE
PRODUCTS DEPARTMENT, ONTARIO, CALIF.
Producing Plant:
The Exchange Orange Products Co., Ontario, Calif.

Exchange
OIL OF
ORANGE
U. S. P.

FOR WANT OF A FRAGRANCE THE PRODUCT WAS LOST
new scents
fragrances
creative perfuming
aromatics
D & O
Too bad . . . it could have been a successful product . . . it had everything but the *right* fragrance.
D & O master perfumers are like conjurers who with inventive hands catch rainbows . . . ensnare the invisible . . . trap the incredible to win greater favor and acceptance for your product.
D&O
DODGE & OLCOTT, Inc. 180 VARICK STREET, NEW YORK 14, N. Y.
Boston • Chicago • Philadelphia • St. Louis • Los Angeles • Plant and Laboratories, Bayonne, N. J.

NH_2

Monsanto pharmaceuticals

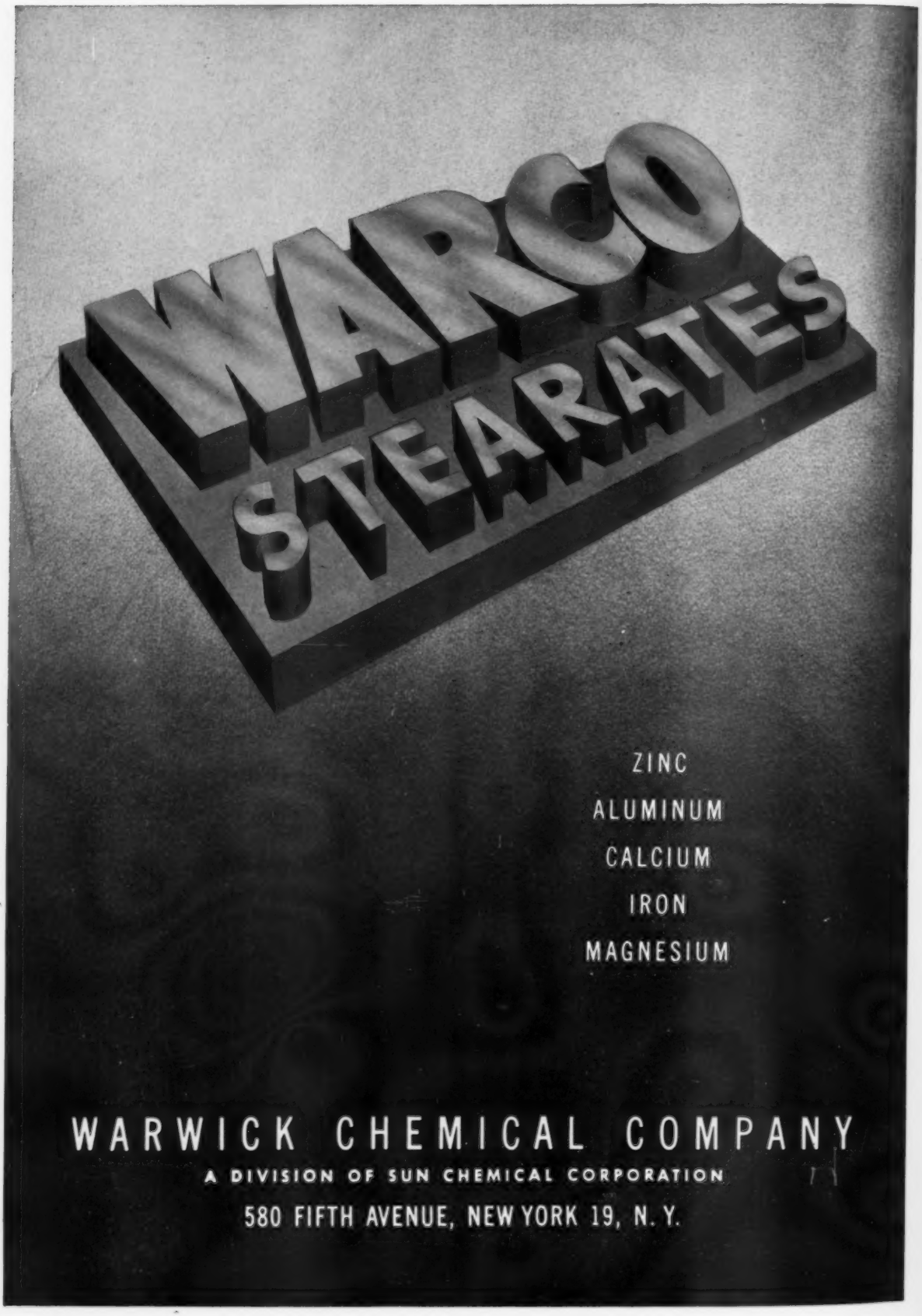
- Benzyl Benzoate
- Saccharin, U.S.P.
- Glycerophosphates
- Sodium Benzoate, U.S.P.
- Sodium Phosphate, Di
- Methyl Salicylate, U.S.P.
- Ferric Phosphates
- Chloral Hydrate, U.S.P.
- Caffeine, U.S.P.
- Phenol, U.S.P.
- Benzoic Acid, U.S.P.
- Magnesium Phosphates
- Salicylic Acid, U.S.P.
- Phenolphthalein, U.S.P.
- Chloramine-T, U.S.P.
- Phosphoric Acid
- Calcium Phosphate, Di
- Acetyl Salicylic Acid (Aspirin)
- Acetophenetidin, U.S.P.
- Potassium Ammonium Phosphate
- Sodium Salicylate, U.S.P.
- Sulfanilamide, U.S.P.
- Acetanilid, U.S.P.
- Salol (Phenyl Salicylate)

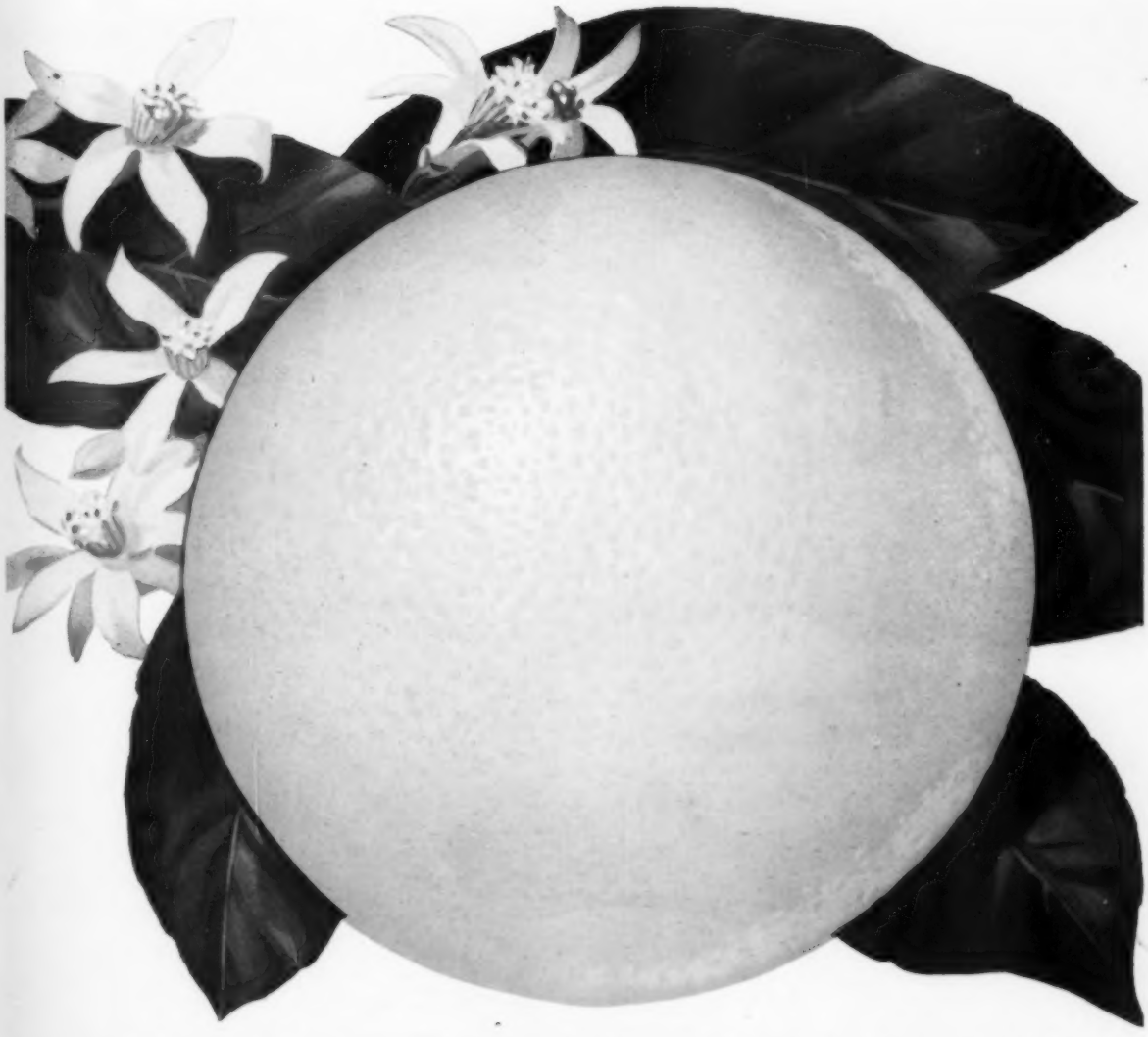
SO_2
|
NH_2

SULFANILAMIDE, U.S.P., is a Monsanto pharmaceutical product of recognized quality and high purity—the result of exercising every known precaution in the many stages of research, testing and control to which all Monsanto pharmaceuticals are subjected . . . Technical service available . . . Contact the nearest Monsanto District Sales Office or write MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 1700 S. Second Street, St. Louis 4, Mo. . . . District Sales Offices: New York, Chicago, Cleveland, Boston, Detroit, Charlotte, Cincinnati, Birmingham, Los Angeles, San Francisco, Seattle. In Canada: Monsanto (Canada) Ltd., Montreal.

MONSANTO
CHEMICALS — PLASTICS

SERVING INDUSTRY . . . WHICH SERVES MANKIND


WARCO
STEARATES
ZINC
ALUMINUM
CALCIUM
IRON
MAGNESIUM
WARWICK CHEMICAL COMPANY
A DIVISION OF SUN CHEMICAL CORPORATION
580 FIFTH AVENUE, NEW YORK 19, N. Y.



THE WORLD'S FINEST ORANGE OIL

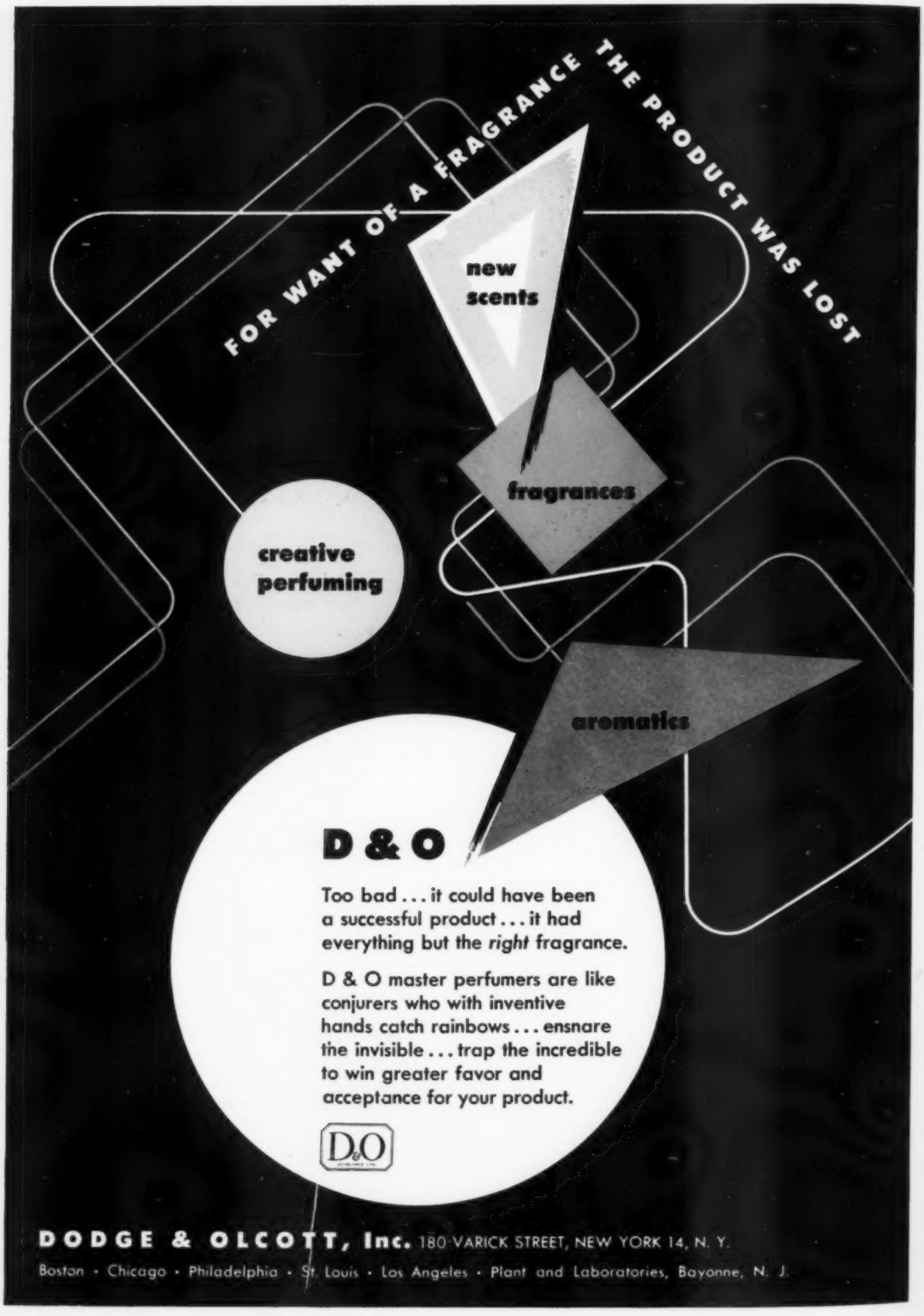
Made exclusively from oranges from the Sunkist Groves of California.

Exchange Oil of Orange gives you more *real orange flavor*, drop for drop or pound for pound, than any other orange oil.

Give it all your tests for *quality, uniformity* and *strength*. Then you'll buy Exchange Brand.

Distributed in the United States exclusively by
FRITZSCHE BROTHERS, INC.
76 Ninth Avenue, New York 11, N. Y.
DODGE & OLCOTT, INC.
180 Varick Street, New York 14, N. Y.
Distributors for:
CALIFORNIA FRUIT GROWERS EXCHANGE
PRODUCTS DEPARTMENT, ONTARIO, CALIF.
Producing Plant:
The Exchange Orange Products Co., Ontario, Calif.

Exchange
OIL OF
ORANGE
U. S. P.

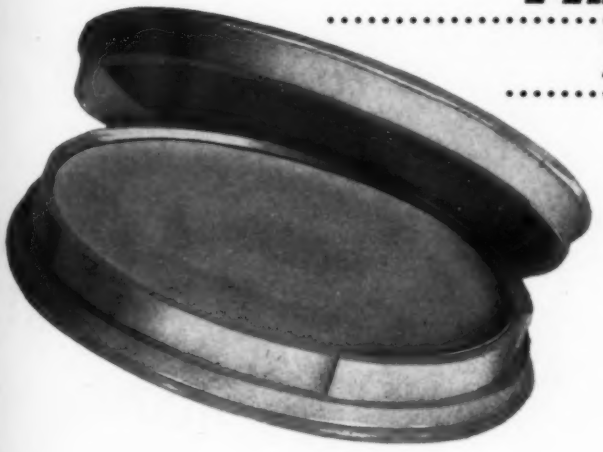

FOR WANT OF A FRAGRANCE THE PRODUCT WAS LOST
new scents
fragrances
creative perfuming
aromatics
D & O
Too bad . . . it could have been a successful product . . . it had everything but the *right* fragrance.
D & O master perfumers are like conjurers who with inventive hands catch rainbows . . . ensnare the invisible . . . trap the incredible to win greater favor and acceptance for your product.
D&O
DODGE & OLCOTT, Inc. 180 VARICK STREET, NEW YORK 14, N. Y.
Boston · Chicago · Philadelphia · St. Louis · Los Angeles · Plant and Laboratories, Bayonne, N. J.

...New

...DIFFERENT

...Exciting

PRESSED POWDERS IN CAKE FORM



The make-up that goes on, and stays on... *without* water. The one really new addition to the cosmetic field, that has proven an immediate success.

Here's Why:

It's a perfect traveller ... nothing to spill

Leaves a satin-smooth finish.

Not drying, clings smoothly and evenly.

No water needed, easily applied with a puff.

New ingredient makes for loveliness that lasts.

It's a perfect addition to your line

— a real money-maker

Evans Chemetics Inc. will be pleased to furnish pertinent information on this product. Call or write today.

EVANS

Evans Chemetics INC.

250 EAST 43rd STREET, NEW YORK 17

In England, Evans Chemicals, Limited

No other lipstick gives you all these *Zimmerman* advantages

NEW HOMOGENIZED LIPSTICK!

1. EXTRA SMOOTH
2. LONGER LASTING
3. NON-TOXIC—EVEN TO SENSITIVE LIPS
4. EMOLLIENT MADE—SOFT AND SOOTHING

YES, you'll find our new emollient lipstick is well worth investigation.

We can also handle a limited number of new orders for creams, powders, lotions, rouges, eye preparations, perfume, cologne and other specialties. Whether you want us to follow your specifications or ours, you are assured of high quality and efficient service.

W. F. ZIMMERMAN, INC.

404 Fourth Avenue
New York 16, N. Y.

2 Plants

605-635 So. 21st St.
Irvington, N. J.

• *Manufacturers* • *Packagers* •

QUALITY Z INTEGRITY Z SERVICE

Mexican Representative: Sixto Noreiga R., Apartado 697, Mexico, D. F.

Bouquet Superb
A rich fragrance suitable for moderate priced extracts and colognes.
Bouquet ABS
A delightfully soft, mellow, semi-floral fragrance ideally suited for colognes. Quite inexpensive.

Finished extracts and colognes made with the above fragrances available in bulk

Samples and prices on request

ORBIS PRODUCTS CORPORATION
215 PEARL STREET, NEW YORK
FACTORY AND LABORATORY: NEWARK, N. J.

COSMETIC RAW MATERIALS
WATER SOLUBLE GUMS
FOOD COLORS

PERFUME BASES
ESSENTIAL OILS
FRUIT FLAVORS

QUINCE SEED
OLEO RESINS
STEARIC ACID

WAXES
THYMOL
AROMATICS

CHICAGO PHILADELPHIA MEXICO, D.F. BOSTON LOS ANGELES MEMPHIS, TENN.

One Year Old...

• • • yet behind this new business is the experience of 37 years — over three decades since Dr. Alexander Katz entered the essential oil, flavoring, and perfume materials business which was a continuation of the business established by his father in 1876. The new business, which is managed by an experienced and competent staff who have been connected with Dr. Katz for many years, is growing rapidly. It is well out of the embryo stage, and entering its second year with excellent production facilities and control laboratories to successfully meet the requirements of the trade.

The entire organization is grateful to its friends for the splendid support given during the first year

"Our Research Laboratory Is At Your Service"

DR. ALEXANDER KATZ & CO. 4641-43 HOLLYWOOD BOULEVARD, LOS ANGELES 27, CALIF.
948 HOWARD STREET, SAN FRANCISCO 3, CALIFORNIA

ESSENTIAL AROMATICS CORP. 304 EAST 23rd STREET, NEW YORK 10, NEW YORK

CHICAGO • DALLAS • NEW ORLEANS • MINNEAPOLIS • SEATTLE

always the same . . . always different

a color from thomasset is as nearly the same, lot after lot, as experience from lake color's earliest days can make it ◦ but in this respect thomasset colors are *different*: they come from the only color house that makes cosmetic colors alone, no other kind ◦ you know what that difference means in terms of your products' uniformity, toward getting the quantities you want and the purity you demand ◦ color in this advertisement suggests warming brilliance of thomasset color d & c 21 . . . bromo acid c. p.

thomasset colors

Whittaker, Clark and Daniels • INC., NEW YORK

helping the

CERAMIC MAN

helps us help the

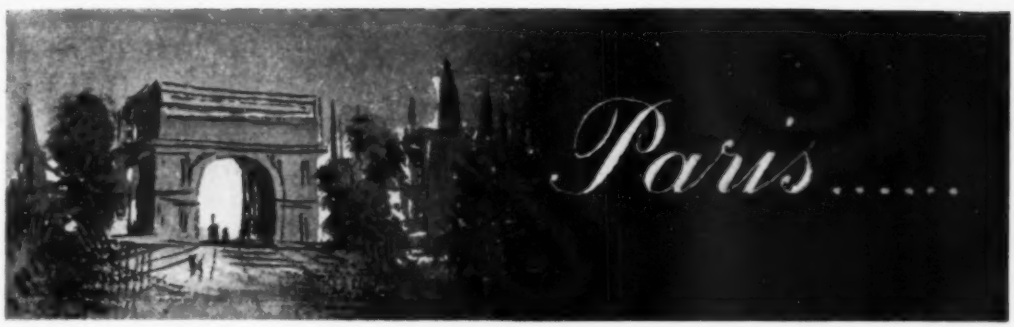
DRUG PRODUCER

Whittaker — wherever there is need for minerals, colors, pigments — in countless industries — for countless uses. Whittaker — wherever there is need for *extra* service, the solution of complex problems dealing with the use of these materials. The diversified experience, the complete background, the perspective gained serving these many industries — all are at your call . . . the better to serve *you*. Whittaker goes far beyond merely supplying products as ordered. If you need assistance on some special problem — contact a Whittaker representative; or write Whittaker, Clark & Daniels Inc., 260 West Broadway, New York 13, N. Y.

. . . and you

ALBATEX • ALUMINUM SILICATE • BARIUM SULFATE • BENTONITE • CALCIUM CARBONATE • CALCIUM HYDROXIDE • CALCIUM OXIDE • CHALK (PRECIPITATED) • CERTIFIED COLORS (D & C) • COSMETIC ZINC STEARATE • DIATOMACEOUS EARTH • FULLER'S EARTH • GYPSUM • HYDRO-MAGMA PASTE • KAOLIN (COLLOIDAL) KIESELGUHR • MAGNESIA • MAGNESIUM CARBONATE • MAGNESIUM HYDROXIDE • LO-MICRON MAGNESIUM SILICATE • LO-MICRON OXIDE COLORS • POWDER BASE • PYROPHYLLITE • RICE STARCH • STEARATES TALC — IMPORTED AND DOMESTIC • TITANIUM DIOXIDE — PURIFIED • USP TALC • WHITING • ZINC OXIDE

WHITTAKER
EST. 1890
MINERALS COLORS
PIGMENTS



In each of these great centers of the Soap, Perfumery and Cosmetics industries there is a Chiris company, with a complete production and distribution service. These companies pool all the experience and technical resources which nearly 200 years of outstanding leadership in the World's Essential Oil and Aromatic industries have made available to the House of CHIRIS.

ANTOINE CHIRIS Co., Inc.

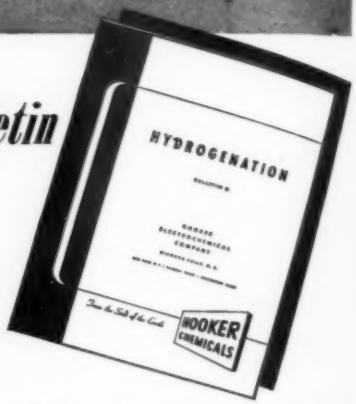
115 EAST 23rd STREET, NEW YORK

ESTABLISSEMENTS ANTOINE CHIRIS GRASSE - PARIS

ANTOINE CHIRIS, LTD. LONDON

If you are interested in *Hydrogenation*

You will be interested in this bulletin



Whatever the stage of your "thinking" regarding the hydrogenation of your products or raw materials, you ought to have a copy of the new Hooker Hydrogenation Bulletin. This Bulletin describes the hydrogenation facilities of Hooker's two plants, the types of hydrogenations we are doing, the procedure for both preliminary and laboratory evaluation and the help that Hooker hydrogenation experts can give you.

Hooker has been carrying out hydrogenations at pressures as high as 2500 p.s.i. Careful supervision and the use of high purity hydrogen, a co-product from the electrolytic production of chlorine and caustic soda, assure commercial processing with no diminution of product purity.

Demands on Hooker facilities for hydrogenation are increasing continually. If you are considering hydrogenation, even remotely, we suggest you send for a copy of this Hydrogenation Bulletin, No. 8. A request on your company letterhead will bring it to you. Your next step might well be a discussion of your needs with us so that when ready, your hydrogenation requirements may be fulfilled without delay.

HOOKER ELECTROCHEMICAL COMPANY

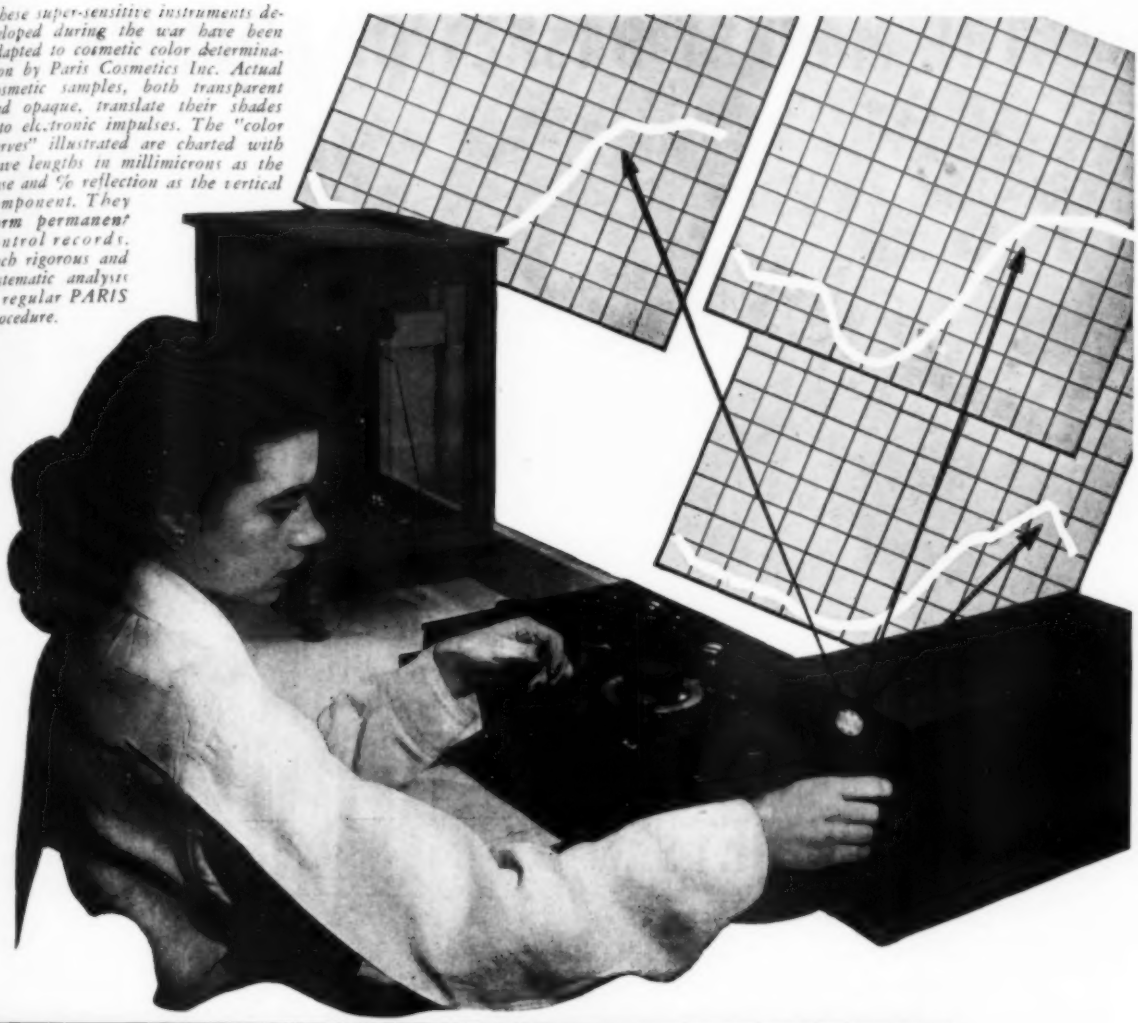
13 Forty-Seventh St., Niagara Falls, N. Y.
New York, N. Y. Wilmington, Calif. Tacoma, Wash.

HOOKER CHEMICALS

From the salt of the earth

Caustic Soda Chlorine Paradichlorbenzene Sodium Sulfide Muriatic Acid Sodium Sulfhydrate

These super-sensitive instruments developed during the war have been adapted to cosmetic color determination by Paris Cosmetics Inc. Actual cosmetic samples, both transparent and opaque, translate their shades into electronic impulses. The "color curves" illustrated are charted with wave lengths in millimicrons as the base and % reflection as the vertical component. They form permanent control records. Such rigorous and systematic analysis is regular PARIS procedure.



ELECTRONIC COLOR CONTROL

ANOTHER EXAMPLE OF *Paris* PIONEERING

"Matching by eye" is now out when it comes to lipstick, powder, rouge and other cosmetic shades. Every color writes its own electronic signature as a mathematical graph in the Paris Cosmetics laboratory. Every time you try to match lipstick "smears" on the back of your hand or start checking the shades of new face powder shipments, think of what this modern advance means to you. It's another Paris extra added to the high quality standards and reliability so important to stylists and purchasing agents seeking to improve lines or individual items. Consult Paris Cosmetics Inc. without obligation for creative suggestions.

Paris
COSMETICS, INC.
116 West 14th Street New York 11, N. Y.
Cable: Paristic New York

EXCLUSIVELY UNDER PRIVATE LABEL —
LIPSTICKS • FACE POWDERS • DRY ROUGES • CREAM ROUGES
CAKE MAKE-UP • EYE SHADOW • MASCARA • COMPACT
POWDERS • DUSTING POWDERS • FACE CREAMS • PERFUMES
COLOGNES • TOILET WATERS • SACHETS • LOTIONS
All products fully covered by manufacturers' liability insurance

THE MARKET BASKET OF AMERICA

IS MADE BETTER BY CHEMICALS

With America's standard of living now on a $125,000,000,000 basis, the emphasis will be on quality. We shall see quality built into nature's products through chemistry.

Isco chemicals, gums and waxes go to market in improved grocery store consumer products. Isco waxes are used to polish and improve the appearance of grapefruit, apples, other fruits, and many vegetables. Isco gums are used in cheeses and other dairy products. Your favorite steak sauce may contain Isco Gum Tragacanth. Fillers for food products, raw materials for chewing gum, and food preservatives—all contain Isco products. Your table salt runs free in any kind of weather because of an Isco product. Jelly beans—when they are available—are polished with Isco Products. Chocolate coated nuts are made more tempting with Isco Products. Isco Gum Arabic goes into the manufacture of confections, and Isco Beeswax puts glamour into cosmetic creams.

You will find Isco chemicals in all walks of life—heavy industry, drugs and cosmetics, paints and varnishes, agricultural insecticides, to mention but a few. Why not put Isco's 131 years of experience to work for your products.

ISCO

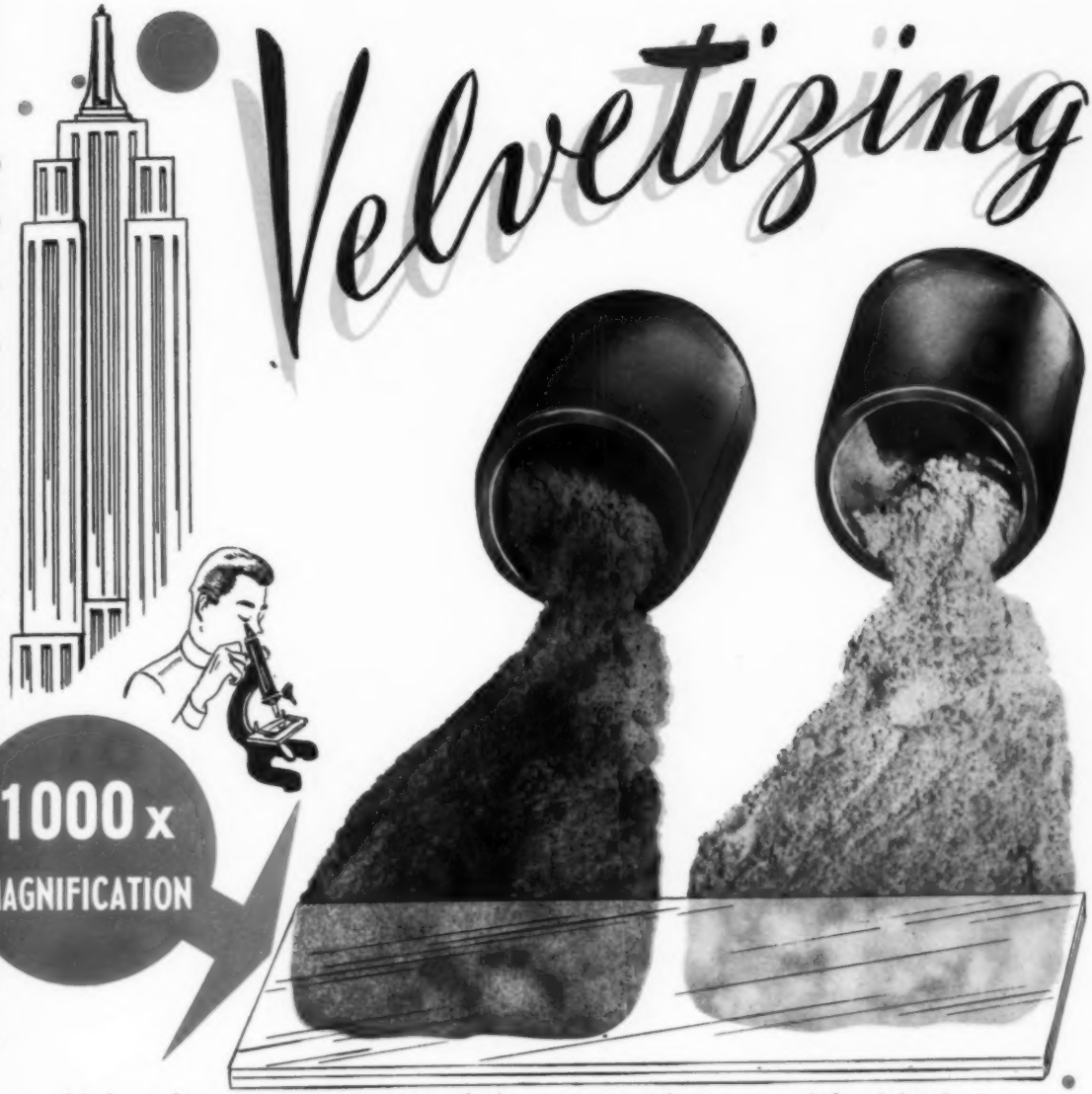
1816 1947

117 LIBERTY STREET
NEW YORK 6, N. Y.
BOSTON • CLEVELAND
CHICAGO • GLOVERSVILLE
CINCINNATI • PHILADELPHIA

Innis, Speiden & Co.

A NAME AS OLD AS THE AMERICAN CHEMICAL INDUSTRY

Velvetizing



Modern achievement in engineering methods has made possible greater perfection in manufacturing facilities. In our plant, this advance has produced a Rouge and Powder that are the finest on the market due to the exclusive Private Label Process—*VELVETIZING!*

VELVETIZING does what scientists have merely dreamed of doing for ages—

It makes certain our Rouge and Powder cover every peak and valley of the skin.

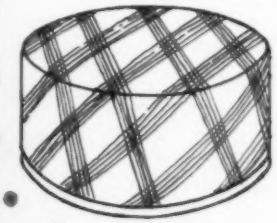
It makes certain our Rouge and Powder are soft to the touch.

It makes certain our Rouge and Powder have greater spreading power and that definitely desirable *soft matt finish.*

It makes certain our Rouge and Powder have the moisture-repelling feature.

And now for proof! Photomicrographs tell the truth! Those presented here show the texture of our Rouge and Powder magnified 1000 times. Note the softness and density of the microscopic particles—and you'll know Private Label *VELVETIZING* Process truly makes possible this finest Rouge and Powder!

Our factory is at your disposal! Write for samples on your letterhead!

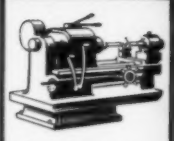


PRIVATE LABEL COSMETIC CO.

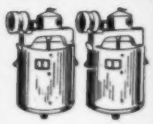
520 West 48 St. New York 19

Unique Stability in NEW, IMPROVED Emery Elaines*

Low-titre soaps



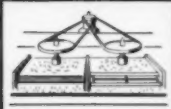
Lubricants . . . special greases



Metallic oleates . . . Esters

Emulsifier...Polishes, disinfectants, oil and wax emulsions

Typewriter ribbons . . . carbon papers



Flotation

Textile processing

BETTER PERFORMANCE in EVERY USE

Repeated tests on all Emery Oleic Acids and products manufactured from them prove:

- **Greater STABILITY**
- **High resistance to OXIDATION**
- **Least tendency toward RANCIDITY**
- **Superior "ODOR" characteristics**
- **Improved HEAT STABILITY**
- **Same properties imparted to finished Products in many cases**

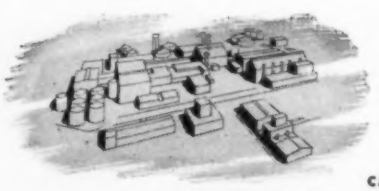
Regular Grades

	0-18 Elaine	0-19 Low-titre Elaine
Titre	8—11° C.	3—5° C.
Color (Lovibond)	30Y—8 Red, 1"	30Y—8 Red, 1"
Iodine Value	90—93	91—95
Sap Value	195—199	195—199
Unsap (max.)	3.0%	3.0%

Special Grades

	0-20 White Elaine	0-21 Low-Titre White Elaine
Titre	8—11° C.	3—5° C.
Color (Lovibond)	15Y—1.5 Red, 5¼"	15Y—1.5 Red, 5¼"
Iodine Value	90—93	91—95
Sap Value	197—201	197—201
Unsap (max.)	2.0%	2.0%

*Elaine is the trade mark for all Emery Oleic Acids



EMERY

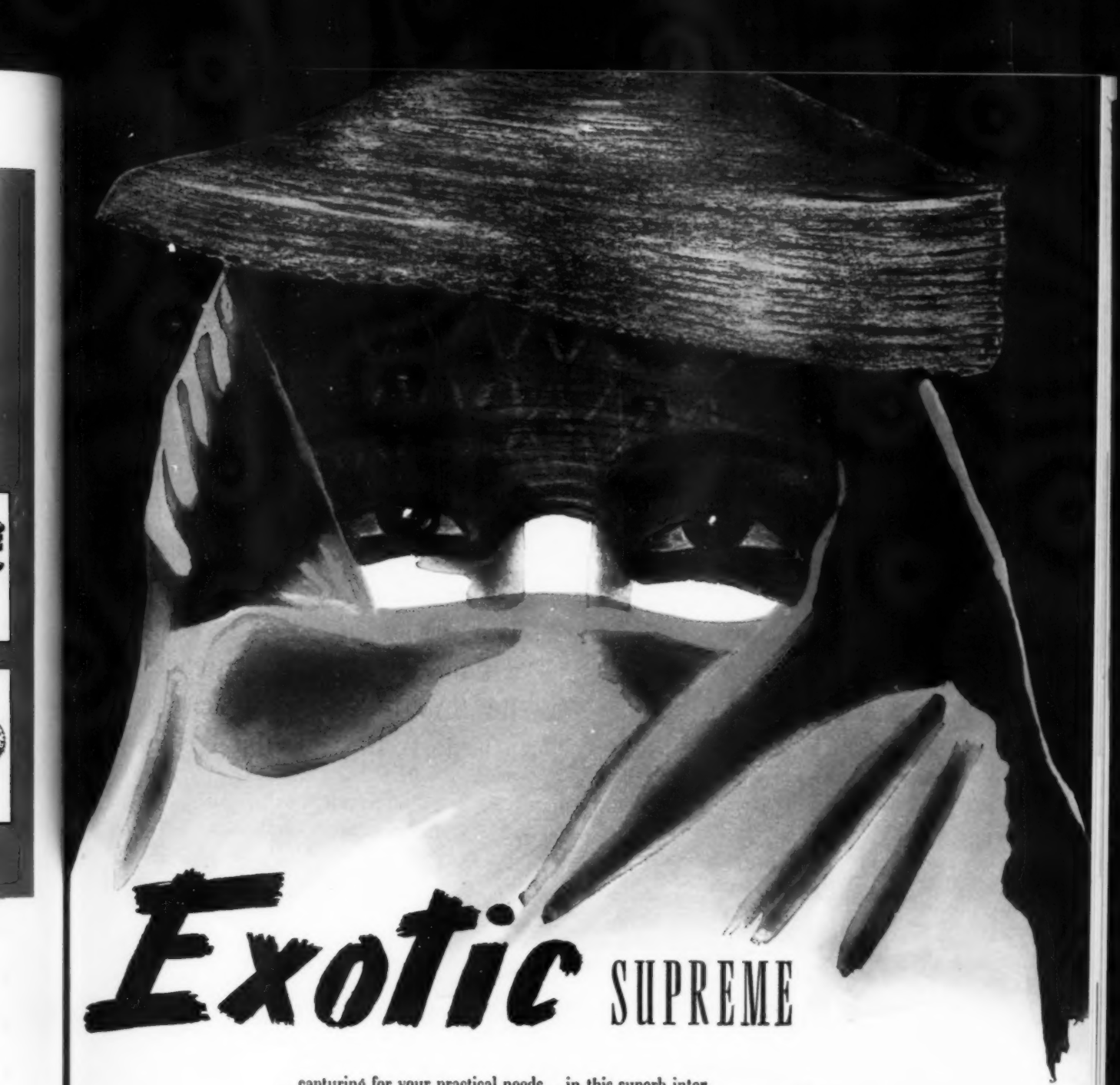
INDUSTRIES, INC.

LIQUID FATTY ACIDS

CAREW TOWER • CINCINNATI 2, OHIO

3002 Woolworth Building, NEW YORK 7, N. Y.
187 Perry Street, LOWELL, MASSACHUSETTS
401 N. Broad Street, PHILADELPHIA 8, PA.

STEARIC ACID • OLEIC ACID • ANIMAL AND VEGETABLE FATTY ACIDS • TWITCHELL PRODUCTS • PLASTICIZERS



Exotic SUPREME

...capturing for your practical needs...in this superb interpretation of its subtle fragrance...the mystery of the exotic mood...

FLORASYNTH'S **Exotic** SUPREME

...delicate appeal...amazing practical application...An essence supreme...

Florasynthetics
for faithful
FLORAL REPRODUCTIONS
JASMIN • BERGAMOT • LAVENDER
and others...
Established Essentials!

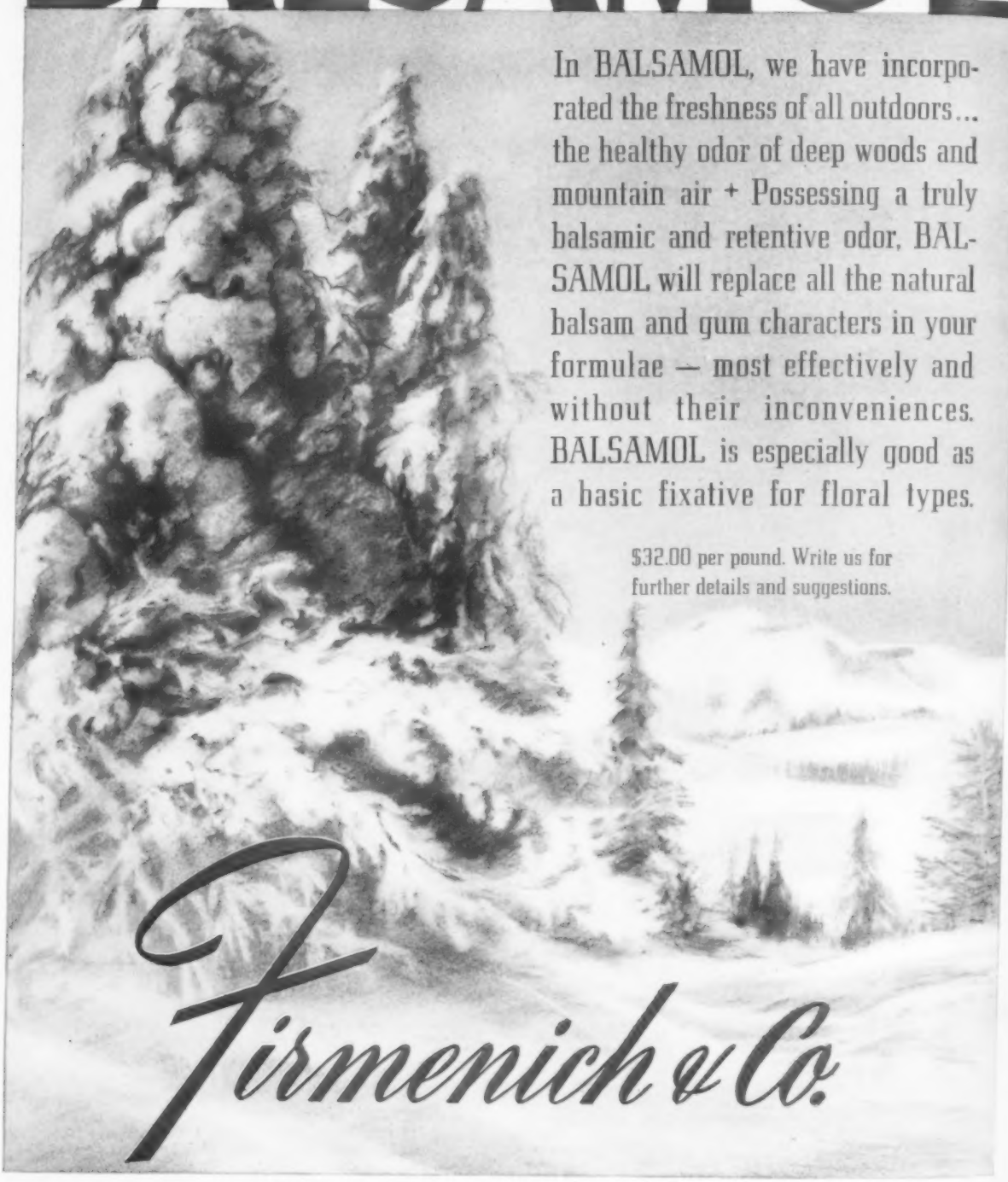
Florasynth LABORATORIES, INC.
CHICAGO 6 · NEW YORK 61 · LOS ANGELES 13

DALLAS 1 • DETROIT 2 • MEMPHIS 1 • NEW ORLEANS 13 • ST. LOUIS 2 • SAN BERNARDINO • SAN FRANCISCO 11

Florasynth Labs. (Canada) Ltd. — Montreal • Toronto • Vancouver • Winnipeg

Florasynth Laboratorios de Mexico S. A. — Mexico City

BALSAMOL



In BALSAMOL, we have incorporated the freshness of all outdoors... the healthy odor of deep woods and mountain air + Possessing a truly balsamic and retentive odor, BALSAMOL will replace all the natural balsam and gum characters in your formulae — most effectively and without their inconveniences. BALSAMOL is especially good as a basic fixative for floral types.

$32.00 per pound. Write us for further details and suggestions.

Firmenich & Co.

135 FIFTH AVENUE · · · NEW YORK 10, N. Y.

CHICAGO OFFICE: 612 NORTH MICHIGAN AVENUE · IN CANADA: CARAMEED, LTD., 570 ORIOLE PARKWAY, TORONTO

"That settles it!"

SHE BOUGHT YOUR PRODUCT BECAUSE SHE SAW IT ADVERTISED OR ITS ATTRACTIVE PACKAGE APPEALED TO HER. BUT IF, WHEN IT'S *USED*, IT HAS A WATERY, "SETTLED OUT" OR CURDLED APPEARANCE, YOU'RE OUT OF LUCK ON PROFITABLE REPEAT SALES

Many manufacturers, alert to this fact, are now improving their products with Kraystay. This remarkable vegetable stabilizer gives many products an *even* and *lasting* distribution of color and body.

Kraystay has unusual stabilizing, emulsifying and suspending effects. Used in a more concentrated solution, thickening or gelling can be accomplished. Kraystay is adaptable for use in cream lotions, hand lotions, toothpaste, cosmetics, pharmaceuticals, foods, and many other products of *medium* or *low* acidity.

Find out more about Kraystay. Call or write today, stating the nature of your product. Or, if you wish to submit your formula, Kraft technicians will be glad to assist you in the application of Kraystay to it. Kraft Foods Company, Dept. Y-13, 500 Peshtigo Court, Chicago 90, Illinois.

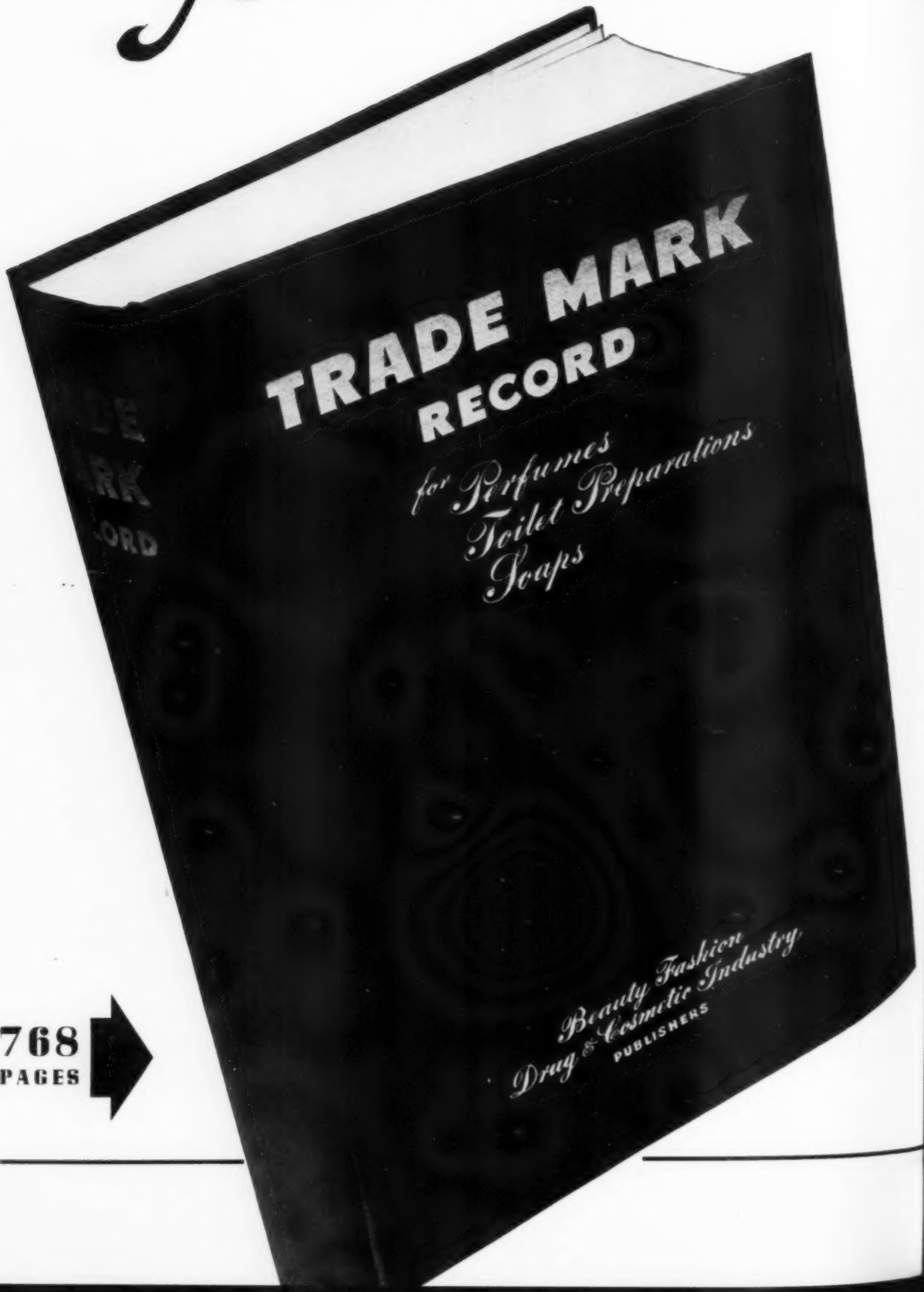
FROM TINY FRONDS OF CARRAGEEN *(edible Irish moss) gathered from the cold ocean floor, Kraft extracts a clear, pure vegetable gelose for use in the manufacture of Kraystay. Modern scientific laboratory control insures the uniform high quality of this consistently efficient stabilizer.*

A NEW DEVELOPMENT IN VEGETABLE STABILIZERS

Kraystay

MADE BY KRAFT

Announcing the NEW



768 PAGES

TRADE MARK RECORD

for Perfumes, Toilet Preparations, Soaps

COVERING ALL TRADE-MARKS in CLASS IV and VI

Soap Preparations
Perfumes
Cosmetics
Depilatories
Manicure Preparations
Foot Preparations
Permanent Wave Supplies
Hair Preparations
Men's Toilet Preparations
Tooth and Mouth Preparations
Miscellaneous

Over 35,000 trade-marks for quick reference and checking!

★★★

Value of The Trade Mark Record to You

There are two major reasons why the Record will be of great value to you.
You can locate here any particular trade-mark which is of interest to you.
You can also find out here the pertinent details of the mark—its products—its owner—date of registration, date of first use.
The book is alphabetically arranged according to the principles usually adopted for telephone and similar directories.

The present Record incorporates within its listings all of the trade-marks of the prior book published by the Toilet Goods Association in 1936, and brings the compilation up to January 1, 1946.
The Record also includes such unregistered trade-marks as supplied by the Toilet Goods Association.
The Trade Mark Record covers all registered marks for more than 50 years!

★★★

The Record is Essential to Manufacturers of:

Bath salts, Bath oil, Bubble bath, Shampoo, Soap, Soap powder, Soap chips, Soap flakes, Cleansing preparations. Cologne, Cream perfume, Liquid perfume, Powdered perfume, Perfume sachet, Toilet water, Lipsticks, Rouge, Face powder, Mascara, Eyeshadow, Eyebrow preparations, Eye lotions, Cake make-up, Body and bath powder, Cold—vanishing—tissue—foundation—hand—cleansing creams and lotions, Body lotions, Skin whitener, Baby powders, Sun creams and lotions, Epilators, Depilatories, Deodorants, Antiperspirants (all in liquid, cream or powder form), Nail polish, Nail powder, Nail lacquer, Nail cream, Nail white, Nail polish remover, Nail polish base, Overcoat, Foot creams, Foot powders, Foot baths, Permanent wave supplies, Hair preparations, Men's toilet preparations, Tooth paste and powder, Mouth wash, Breath-sweeteners, Denture cleaners, Preparations for dentures firmly in place, Dentifrices.

Patent Attorneys Advertising Agencies Libraries Consumer Magazines will find the Record invaluable—a saver of time and expense in research and checking.

768 PAGES

★★★

Beautifully Printed and Bound

PRICE $25.00

ORDER YOUR COPY NOW!

***Book Department* DRUG & COSMETIC INDUSTRY**

101 W. 31st Street . . . New York 1, N. Y

Sturge Standard Precipitated

Chalk

Standard for over 50 Years

LIGHT, MEDIUM AND HEAVY GRADES

Rigid uniformity in the specific grade desired

●

Depend on STURGE for QUALITY and UNIFORMITY

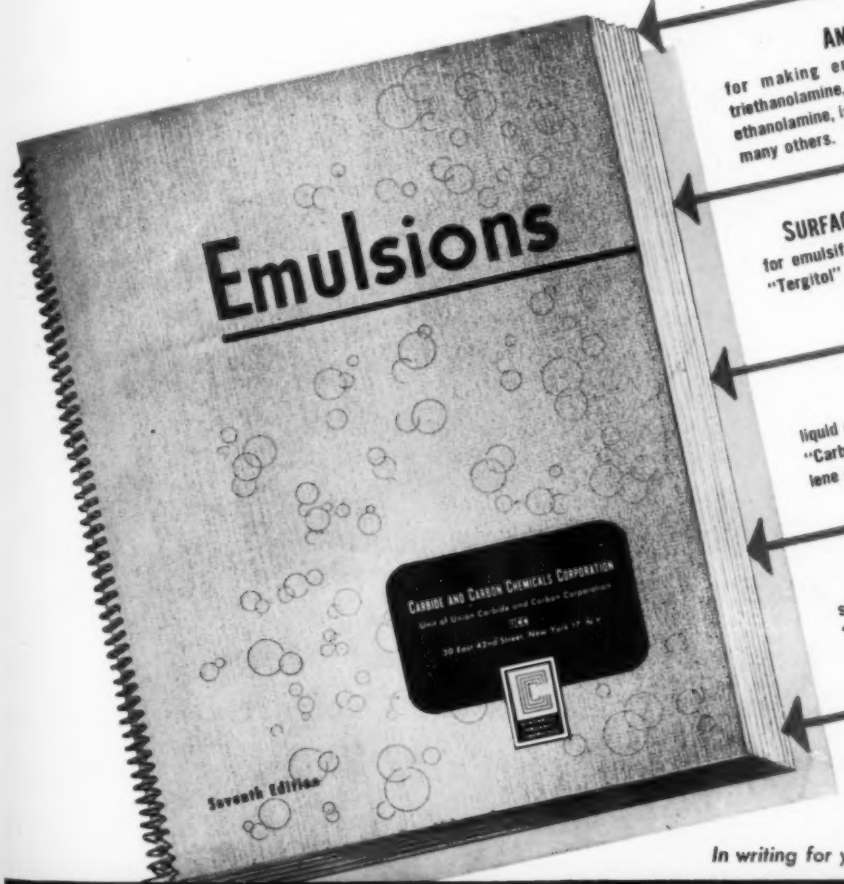
JOHN & E. STURGE *Limited*

Distributors: H.J. BAKER & BRO. 271 Madison Ave., New York 16, N.Y.

Emulsion Chemicals *for*

- agricultural sprays
- cosmetics
- floor waxes
- shoe polishes
- textile oils
- leather finishes
- water paints
- pharmaceuticals
- shampoos
- cutting oils

The seventh edition of our "Emulsions" book, containing suggested formulas and methods of emulsifying industrial oils, fats, waxes, and greases, has just been printed. This 72-page book includes complete information on the use of our chemical products in recently developed emulsion formulas:



AMINES
for making emulsifying agents: triethanolamine, morpholine, monoethanolamine, isopropanolamines, and many others.

SURFACE-ACTIVE AGENTS
for emulsifying chlorinated solvents: "Tergitol" wetting agents.

EMOLLIENTS
liquid or solid vehicles and ointments: "Carbitol", propylene glycol, polyethylene glycols, "Carbowax" compounds.

PROTECTIVE COLLOIDS
stabilizing and thickening agents: "Cellosize" Hydroxyethyl Cellulose WS.

SOLVENTS
all types for coupling agents and cleaning compounds.

In writing for your copy, please address Dept. RD

CARBIDE AND CARBON CHEMICALS CORPORATION
Unit of Union Carbide and Carbon Corporation
UCC
30 East 42nd Street, New York 17, N. Y. Offices in Principal Cities
Distributed in Canada by Carbide and Carbon Chemicals, Limited, Toronto

SYNTHETIC ORGANIC CHEMICALS

"Tergitol," "Carbitol," "Cellosize" and "Carbowax" are trade-marks of C. & C. C. C.

has an enviable reputation, having made a marked contribution to the success of so many perfumes, colognes and toiletries which contain alcohol.

It really removes the sharpness of alcohol odor and lets the fragrance come through.

If you aren't already using it, write us for a sample of Tonkaire and directions for use. You'll really be amazed at the results!

COMPAGNIE PARENTO
INCORPORATED
CROTON-ON-HUDSON, NEW YORK

NEW YORK • CHICAGO • DETROIT • LOS ANGELES • SAN FRANCISCO • SEATTLE
PHILADELPHIA • TORONTO • MONTREAL • LONDON, ENGLAND

NAIL ENAMEL in BULK

The INTERNATIONAL FAVORITE

There have to be sound reasons for *Durlin's* world wide reputation as the foremost name in bulk *Nail Enamel.*

Durlin's reputation lies in a customer service that has paid big dividends to the many users of their *Nail Enamel. Durlin* color sense, shown by an early awareness of fashion trends, selection of colors and aid in packaging has many times helped customers to that "extra edge" which brings success.

When you think of *Nail Enamel,* think of *Durlin.*

DURLIN CO.
744 Broad Street
Newark 2, N. J.
Cable Address: Durlin Newark Newjersey

Fahrenheit's zeal never slackened

For years Fahrenheit attempted to construct a practical thermometer so that he could with his . . . "own eyes perceive this beautiful phenomenon of nature" . . . that water boils at a fixed heat. His zeal never slackened.

And for years the efforts of the instrument maker were in vain until he remembered that the column of mercury in a barometer was "a little altered by the varying temperatures of the mercury. From this I gathered that a thermometer could be constructed of mercury. . . ."

The rest is history. Fahrenheit's mercury thermometer, perfected in 1714, and his scale of temperatures are in common use throughout the English speaking world.

Mallinckrodt Mercurials have far reaching uses. Over thirty compounds are manufactured in accordance with the Mallinckrodt tradition of purity, uniformity and dependability. These compounds include Calomel, Corrosive Sublimate, Mercury Iodide, Nitrate, Oleate, Oxide and other various mercuric and mercurous salts.

MALLINCKRODT CHEMICAL WORKS

80 Years of Service to Chemical Users

Mallinckrodt Street, St. Louis 7, Mo. • 72 Gold Street, New York 8, N. Y.

CHICAGO • PHILADELPHIA • LOS ANGELES • MONTREAL

UNIFORM • DEPENDABLE • PURITY

"Hey, Boss—The lipstick formula has coagulated!"

KEEPING POSTED

Pharmaceutical Promotion

BETTER than $500,000,000 worth of business for the pharmacists has been developed within recent years, according to Stuart V. Smith, vice-president in charge of sales of Wyeth, Inc. The major part of this business is on prescription. The main divisions of this business are: Vitamins, $178,000,000; Sulfonamides and Penicillin, well over $200,000,000; and Hormones, which will be over $100,000,000 in 1947. All this staggering amount of business is comparatively new. Vitamin A and D tablets were not introduced until 1933; research publications on vitamin B did not appear until 1935; and the rapid upward surge in vitamins did not come until after that time. Some companies spent large sums of money trying to sell vitamins by direct advertising to the public, but many of them were compelled to withdraw in the realization that the market is an ethical one and that vitamins can be successfully promoted only through the physicians. Sulfonamides were not available in 1932, and the first wide notice that any of these products obtained was the treatment of President Roosevelt's son early in Roosevelt's first term. Penicillin did not become freely available until almost the end of the war. Hormones have been available to some extent for a longer time, but subsequent research and promotion has proven their efficacy.

Cost of promotion of ethical products by the pharmaceutical manufacturers is estimated by Mr. Smith at $100,000,000 per year. He arrives at this figure as follows: "The minimum cost per call of a detail man in the doctor's office is $5.00. Thus, one call by 6,000 men amounts to $30,000. A detail man will average about five calls an afternoon, that's $150,000 a day. Based on 300 working days a year, it amounts to $45,000,000 . . . Of course, to that $45,000,000 must be added the advertising support, consisting of medical journal advertising, samples for men for their use in detailing the physician, samples by mail and many other promotional media we ethical drug manufacturers use as merchandising tools. Now it is a well-known fact that the cost the promotional support of a salesman is equal to his cost, so that the minimum figure for advertising support would therefore be an additional $45,000,000. Total $90,000,000. Moreover, in 1947 it is estimated that 2,000 additional detail men, or a total of 8,000, will be calling on physicians of this country. This will bring the ethical drug industry's annual merchandising program to well over $100,000,000—all of which is spent to create more sales for the pharmacist."

NWDA Convention Costs Fixed

INTERESTING is the action taken by the National Wholesale Druggists' Association calling for a fixed budget for the annual meeting and the establishment of an all-inclusive registration fee of $40 for men and $10 for ladies. The action was taken because it was the concensus of opinion of the NWDA members that "the solicitation of funds and prizes for the conduct of our meetings has been undesirable and inequitable."

This is welcome action to correct a situation that has been a matter of much unpleasant talk for many years past. Every successive chairman of entertainment had to outdo his predecessors with the result that costs skyrocketed to a point beyond all reason. And these costs had to be made up by the various manufacturers who are associate members of the association. The association is also investigating the advisability of holding a special entertainment and business meeting in the spring, and the annual meeting with a business program only in the fall.

Professor of Perfumery

A NEW chair has been established at the Institute of Medical and Scientific Research of Grasse, the occupant of which will be a Professor of Perfumery. "Why Not?" said the Mayor of Grasse, as quoted in France-Amerique. There are chairs for textiles and silks, for arts and crafts, so why not one for perfumery—one of the most important of French exports. Grasse has long been considered the international capital of the perfume industry. Cultivating and harvesting flowers, distilling, blending, and packing their oils has long been the occupation of most of the inhabitants of the town.

On the Use of Vitamins

WITH respect to the incorporation of vitamins in the diet as food supplements we think that the following statement of Robert R. Williams, taken from his talk given on his receiving the 1947 Perkin Medal Award, for the synthesis of vitamin B_1, is highly significant:

"Enrichment of white bread and flour can be regarded only as cheap insurance for substantially the entire American people against deficiencies of the nutrients added. It costs Americans about 20 cents per capita and is worth it, though it will not prevent cancer, falling hair, or labor troubles. The need for such insurance is indicated by the widespread occurrence in clinical practice of conditions which respond to vitamin therapy. Statistically there is a certain probability of these deficiency conditions affecting individuals in every level of society, but it is higher among low income people. Daily dosing with vitamin tablets would not have become so prevalent if there was not something in it. The truth lies somewhere between the panegyrics of the radio advertisers and the denunciations of vitamin purveyors by the iconoclasts. Vitamin tablets are harmless and we can safely allow the public to decide how much benefit it derives and how much it is willing to pay. Many scientists use them and feel that they benefit. It is folly to assume blandly that human diets are adequate without them. Manufacturers of animal feeds find it necessary to incorporate synthetics in order to get best results. Furthermore, let anyone who thinks his own diet is adequate try feeding it to rats. He is almost certain to encounter failure of reproduction in the second or third generation. How many human mothers are capable of nursing their babies? If resort to the bottle were prohibited, how much rise in infant mortality would result? The wiseacres of nutrition today may put themselves in the position of those of a generation ago who asserted that calories, minerals, and an assortment of amino acids constituted a complete diet. It is wiser to await further experiment and experience before adopting a negative attitude."

Monsanto Relief in Texas City

THE action taken by Monsanto Chemical Company executives to relieve suffering of their employees and families of employees in the Texas City disaster is an excellent example of enlightened management. Board Chairman Edgar M. Queeny and President William M. Rand immediately flew to Texas City on hearing of the disaster. On the spot these executives announced benefits which included immediate payment of $1,000 to each widow or real dependent. This was later confirmed by the Monsanto Board which, in addition, appropriated $500,000 for relief among its employee victims. In addition almost all Monsanto employees with three months' employment were covered by group life insurance plan under which payments are doubled in accidental deaths. Therefore, the beneficiary of an insured hourly employee working at the average hourly wage rate will receive $6,000 to $8,000 insurance. As payments increase in ratio to salary, the widow of a man earning $7,500 will receive approximately $17,500. Payments began 48 hours after the disaster. In addition, workmen's compensation, under the Texas law, will assure each widow or beneficiary $20 a week for 360 weeks, or $7,200. Hospitalization costs of employees and dependents not covered by an employee hospitalization plan will be borne by Monsanto, and full base salaries and wages will be paid during hospitalization and convalescence. Permanently disabled employees will receive payments and other assistance over and above those required by law.

New Inventory Control Method

"LIFO" is a new word with which an increasing number of manufacturers are becoming acquainted. "Lifo" is a coined word meaning "last in, first out." From the angle of income taxes, as well as from the angle of a hedge against declining commodity prices at this time, the Lifo method of inventory valuation takes on added significance. Under other methods of inventory control such as "first in, first out," "average cost," there are periods when the cost of a product at the time of sale may not bear a true relationship to real current and future costs. A number of large companies, particularly in the oil industry, have recently switched from other inventory methods to the Lifo system. By this change one company saved a very substantial sum in income taxes last year.

Our raw materials charts published this month in "Purchasing Department" show, with the exception of fine chemicals, a downward trend of prices. Since there seems to be general belief that the next few years will bring a period of generally declining prices for manufacturers' supplies, the Lifo method of inventory valuation would seem to warrant close scrutiny.

Daggett & Ramsdell Honored for Mark

LAST month Daggett & Ramsdell was added to the honor roll of business firms in this country selected by the Brand Names Foundation to receive the Certificate of Public Service for the 57 years its brand name "Daggett & Ramsdell" has "held public confidence through unfailing integrity, reliable quality and fair pricing." The award was presented to William Bonyun, president of Daggett & Ramsdell, at a luncheon at the Waldorf-Astoria, attended by over 600 business and advertising executives participating in a "Brand Names' Day" program sponsored by the Foundation. Only brand names which have been in continuous use for fifty years or more qualify for the award.

Sales of Wholesalers

WHILE wholesalers' sales, during February of this year, as reported by the Department of Commerce are estimated at $4,738,000,000, an increase of 25 per cent over February of last year, and those of January showed an increase of 27 per cent over January of last year, the increases are due mainly to sales of durable goods. For example, wholesale dealers in electrical goods, motor vehicles, parts and accessories more than doubled their volume, while construction materials volume was up 91 per cent for February as compared with February of last year. Wholesalers of alcoholic beverages showed a decline of 21 per cent for February, the third successive month in which a decline compared with corresponding months of last year, was registered. Sales of drugs and sundries establishments declined six per cent for February, as compared with February of last year, due entirely to declining liquor volume.

People Make the Difference

"THE Importance of Management" is the title given to the opening statement of General Motors Corporation Board Chairman Alfred P. Sloan Jr. in the 1946 financial report of that company. From this statement we quote the following significant paragraph:

"It may properly be said that in our existing industrial economy the only difference of a fundamental nature between one business and another operating in the same general field is the people. The same sources of raw materials are available to all. The same equipment will be furnished to anyone who may buy. The existing standards of technology are largely a matter of common knowledge. The same markets are available with the same instrumentalities to capitalize them. The same reservoirs of capital are available to those who can qualify. All these means are open to everyone and, generally speaking, on equal terms. The one major difference is the people."

This recalls to our mind reading the autobiography of Walter Chrysler some years back. In this story Mr. Chrysler told of the various purchases of other companies by General Motors, stating that they did not generally buy companies for the volume of business which they did, but to get certain personnel connected with those companies. One of the purchases which he specifically mentioned was the acquisition of Delco Laboratories to get Kettering. Not that our own industry has been without purchases of companies for the same purpose.

Therapeutic Research Foundation

THE Therapeutic Research Foundation, the organization established by drug and pharmaceutical manufacturers to conduct research on remedial agents, has circulated to firms throughout this industry a prospectus and a copy of the by-laws of the Foundation. These have been accompanied by an appropriate letter of introduction and an invitation to membership. Russell A. Cain, Ph.D., president and scientific director of the Foundation, stresses the fact that the organization was created to be of service not only to individual firms, but to the entire industry as well. This makes available a centralized organization where firms may pool their research efforts for coordinated and cooperative investigations of therapeutic agents of common interest.

Price-Cutting Trouble in Missouri

MISSOURI, Texas, and Vermont are the only three states without Fair Trade Acts, but there is unrest in Missouri due to this condition. And the trouble appears to have been started by the Katz Drug Company, long remembered as a rugged individualist in drug retailing. It seems that Katz is selling groceries in his drug stores at cut prices as a means of attracting customers for his other products. And other chains have followed suit, causing grocers to retaliate by handling drug products at cut prices. The grocers and the independent grocers have no heart for such a war and they wish they had a law to prevent this. However, with food prices where they are, the grocers hesitate about shouting for a Fair Trade Act. However they might openly work for a fair-practices act on trade-marked and nationally advertised goods. However, such an act would not prevent Katz from cutting prices on dry groceries which have been the most prominent things in the Katz grocery department.

Phonograph Record is a Device

A HYPNOTIST made a phonograph record that is supposed to put to sleep those people who have difficulty in getting to sleep. This record has been sold for five dollars a copy throughout the country. The Food and Drug Administration has instituted proceedings, claiming that fraudulent claims are made for the record. They claim that the record does not do what is claimed for it. The action is taken against the record on the ground that it is device for the mitigation of insomnia, a disease. The case is coming up in the Federal Court in Brooklyn some time in June. The FDA has been conducting clinical tests. These consist of getting people suffering from insomnia to give up their barbiturates and try the record. The FDA claims that in cases such as these the record does not work.

Britain and Tobacco

THE perniciousness of the smoking habit is clearly indicated by the action taken by Britain to tax cigarettes to a point at which it is hoped the British people will sharply curtail their smoking habits and thus reduce the imports of tobacco products into the British Isles. The increase in the tax on cigarettes of one shilling means that cigarette prices there went up from forty-seven cents a package to sixty-seven cents, the seven cents representing the original cost—tobacco, manufacturing, and transportation. The seriousness of the problem to Britain—a country which must export more than it imports to exist—is expressed by the fact that last year British imports of tobacco products alone from the United States totaled $220 million, while British exports to this country of all goods totaled only $140 million. We wonder whether the British people listen to our cigarette radio advertising and go for it in a big way.

Arrest of Foreign Exporter

LOBSTER tails which were decomposed, putrid, and otherwise adulterated under the Food, Drug, and Cosmetic Act, were stopped at the Port of New York and ordered reexported. These lobster tails had been sent in by a Canadian exporter. Some time later the same lobster tails were again shipped into this country, but this time not at New York, but at Newark, N. J. Following the second attempt to ship these goods into this country, a criminal action was brought against the Canadian exporter, but nothing further could be done because the exporter was in Canada. Recently this exporter stepped off a plane at LaGuardia Field, and he was immediately arrested on the charge pending against him. This case should be of particular interest to foreign shippers of any raw materials used by this industry. It shows a determination on the part of the FDA to prosecute habitual shippers of adulterated goods if these shippers ever put a foot in this country.

Cosmetic Shipments Abroad

COSMETIC exports in 1946 were three times greater than prewar, according to T. W. Delehanty, Associate Chief, Chemical and Drug Division, Office of International Trade, who gives 1946 exports a value of almost $30,000,000, of which 24½ million dollars was in foreign countries, and 4½ million dollars in U. S. possessions. The following groups in 1946 were two to three times larger than in 1945: Dentifrices soared from $1,500,000 to over $5,000,000; talcum powder from almost one million to double that amount; and creams, lotions, and balms had a like expansion. Manicuring preparations, which totaled little over a half million dollars in 1945, grew to a million in 1946, and miscellaneous cosmetics rose from a million to more than double that figure. Vanishing creams, rouge, and lipstick foreign sales were somewhat less than in 1945, but all other classifications, notably hair preparations, perfumery and toilet waters rose from 20 to 60 per cent over 1945 offsetting these declines. Mr. Delahanty states that it is obvious that if comparable effort had been expended in promoting demand for all groups in 1946, we would have been much further advanced toward our $60,000,000 goal in 1947.

Dentifrices constitute one-fifth of cosmetic exports, and half of these are sold on the American Continent, while a five-fold gain was made in Asiatic sales of dentifrices. Rouge and lipstick represented one-tenth of foreign sales, although there was a slump in the Latin American sales of these cosmetics. Over half of the shipments of hand, talcum, face, and compact powders as well as creams, lotions and balms went to Asiatic countries in 1946, whereas Latin America was the preferred sphere in 1945. The accelerated buying of the Philippines, China, and India accounted for the reverse in position there being a doubling of the sales of these products there and a 50 per cent upswing in total sales. Manicuring preparation sales to Asia, the principal buyer, were practically tripled, actually within striking distance of sales of these items to all world markets in 1945.

Hair preparations, the pace setter in 1945, was pushed aside by dentifrices. In 1945 Europe was the large market for this group, but in 1946 it diminished considerably due to the loss of $600,000 sales in Italy. Increased demand in a like amount enabled Asia to acquire the lead and account for three-fifths of hair preparation shipments.

Politics and Medicine

WHEN politics get mixed up with health measures almost anything can happen. The recent smallpox scare and city-wide vaccination in New York City was another example of this. Mayor O'Dwyer was presenting for approval the first billion dollar budget. This was getting quite a lot of attention in the newspapers until the smallpox scare arrived and then the citizens of the City talked about nothing but vaccination. So some of the newspaper people were whispering that the whole thing was a trick to get the minds of the people of the City off the budget so that it could be passed quietly, and then the Mayor went to California for a vacation on his brother's ranch. Other reports having nothing to do with politics were to the effect that the city-wide vaccination was a "racket" on the part of the drug manufacturers who wanted to unload large stocks of vaccine. No one seemed to blame it on the doctors, all of whom vaccinated quite a number of people at from two to three dollars each. But by and large, the people of the City figured that vaccination was the proper thing despite all reports.

Keep Making Those Dials!

THE establishment of a definite policy to be followed throughout good times and bad times pays off in the long run. We have all seen examples of this fact. But the latest one to be forcefully brought to our attention is the policy of the telephone company to continue the installation of dial telephones no matter what the economic conditions at the time. It will be recalled that the telephone company had great trouble maintaining a staff of telephone operators immediately following World War I. A short time later the installation of dial phones started. And came the depression of the thirties and the installation of these telephones went steadily on to be interrupted only by the war. In the telephone strike, the dials saved the day. We hate to think of trying to do business in New York or in any other large city during the strike if there were no dial telephones.

Jersey Justice

IN a unanimous decision handed down last month by the Court of Errors and Appeals—the court of last resort in the State of New Jersey—an award of $1,500 to a thirty-three year old woman from a drug store where she had purchased a lipstick which gave her dermatitis, was sustained. But the most peculiar part of this decision is that it declared the fact that the lipstick was in sealed package and not open to inspection by the dealer, and that it was injurious only to a few persons, did not relieve the dealer of responsibility.

Upon investigating this matter further, we have been informed that the courts in New Jersey have ruled that allergy or idiosyncrasy cannot be used as a defense by manufacturers or retailers of any product. In most States the courts will allow for the fact that possibly just a handful of people out of many thousands would react unfavorably to a product and, in most cases, the court rules that the manufacturer or retailer cannot be held liable for the peculiarities of such a small number of people. The attitude of the New Jersey Courts seems very strange in view of the fact that the Food and Drug Administration, in the enforcement of the Federal Food, Drug, and Cosmetic Act, recognizes and makes due allowance for cases of allergic reactions. While we are not of the legal profession, it would seem that there must be some way that this condition could be corrected in this one State. The reason that the effort has not been made probably is that there has not been enough money involved in any case to warrant the expenditure necessary to effect a change.

Penicillin Production Tripled

PENICILLIN production in 1946 more than tripled production in 1945, according to the Office of Temporary Controls. Figures are given as 25,808,570 million units for 1946, against 7,052,387 million units for 1945.

Ethicals Continue to Gain

WITH everyone talking about a depression, the first quarter reports of several of the ethical drug manufacturers showed an improvement in sales and earnings over the sales and earnings of the first quarter of 1946. Some ethical manufacturers showed about an equal comparison for the two quarters, and recessions were extremely few and not sharp. What the rest of the year holds for companies of this type is not certain, but it does not seem that it is going to be as bad as some have predicted.

The ethical phase of drug product marketing continues to expand at a rapid rate while the proprietary or publicly-advertised phase of the industry continues to gain at a much less rapid rate. This is so despite the fact that it was recently stated that the labeling provisions of the Federal Food, Drug, and Cosmetic Act have put all products of the industry into two simple classifications —over-the-counter and prescription items. These two classifications now prevail no matter who makes the products or whether or not they are advertised to the public or merely to the medical and pharmacy professions. The fact of the matter seems to be that more people are relying on doctors than ever before, and doctors naturally using mainly ethical items. Also the people who go to the doctors continue to use the ethical items after they have finished with the doctor, and they tell their friends about the products they are using, causing these friends to use the ethical products also.

An Interesting R-P Decision

IN a five to four decision—close as it can be—the U. S. Supreme Court decided that a manufacturer could not refuse to pay for what he actually bought and received even though the quantity discount allowed the manufacturer might have violated the Robinson-Patman Act and discriminated against the manufacturer. The Court stated that the private remedy given by this law to a buyer injured by its violation is a suit for triple damages, and this suit had already been instituted. We wonder why four of the nine justices were in favor of giving the buyer the goods for nothing. If the majority of the Court has concurred in this view, manufacturers would have been in quite a quandry in using quantity prices, and they might have been in serious trouble if they attempted to discontinue them.

Drug Prices Up Only Slightly

F. J. GRIFFITHS, executive secretary of the National Association of Chain Drug Stores, has pointed out that Chester Bowles, former OPA Administrator, was wrong by more than 60 per cent in his statement in the New York Times magazine, April 27, that prices of drugs and pharmaceuticals are up 67 per cent since last June. Charging that Mr. Bowles resorted to "statistical trick" in arriving at the 67 per cent figure, Mr. Griffiths said:

"He refers to the U. S. Department of Labor, Bureau of Labor Statistics, wholesale weighted average index figures of only twenty-three items, such as acetylsalicylic acid, alcohol, codeine, ergot, ether, opium, etc., a few of which are sold over the counter in drug stores and which bear only the slightest relation to the prices which our customers pay in retail stores.

"For example, opium per pound bears the largest index increase but it reflects only a fifteenth of a cent in dosage form. Acetylsalicylic acid (aspirin) is heavily 'weighted' in the index but it has not increased one cent to the consumer.

"The increase in the price of drugs, pharmaceuticals and cosmetics since June, 1946, does not affect 5 per cent of the items sold in drug stores. As a matter of fact, there has been practically no increase in the price of drugs and cosmetics since 1940. The drug industry has an outstanding record in holding down prices during the war period and since the end of the war, despite the fact that salaries in retail drug stores have increased somewhat between 60 and 80 per cent."

The Lower Markets

THE raw material markets are showing a declining tendency. Particularly is this true of imported natural raw materials. Asiatic essential oils are sharply lower because of the terriffc inflation in China as these people sell at any price to get stable American currency for their goods. Other essential oils generally are declining as foreign shipment prices are cut. Even Java citronella oil has declined as buyers apparently take on commitments only for their immediate needs in anticipation of lower prices in the future. The old rule still seems to hold that buyers never buy on a declining market, rather do they wait until the market shows an upward tendency and bid the market up against one another in a rush to get goods.

Brushless Creams in Lead

ACCORDING to a survey made by Bristol-Myers Company, brushless shaving creams are now used by 53 per cent of the men who use shaving creams of any type. The survey reveals that in the last seventeen years no less than 16,000,000 men have swung away from shaving brushes and use the brushless cream. Back in 1928 only lather creams and soaps were used, but by 1932 the brushless trend had set in and at that time nineteen per cent of all shavers were using the brushless cream. By 1945 this percentage is said to have jumped to 53 per cent.

As a result of this survey, Bristol-Myers—makers of Ingram's Shaving Cream, a lather type—have entered the brushless market with a new product called Benex. The Company says that in preparation for the marketing of their new brushless cream, 459 formulas were laboratory tested before two "passed with flying colors." These two were submitted to "a grueling national field test and the winner became the new Benex."

Note On Liquor

MAKERS of bottles and of corks tell us that the business in liquor has declined sharply. Bottling of liquor, they tell us, is pretty well confined to pints and half-pints, they say. Not that this is pertinent to this industry, but it must mean something, and you figure out for yourself just what you want it to mean.

A Weakness in the Food, Drug and Cosmetic Act

THE purpose of the Federal Food, Drug, and Cosmetic Act is to protect the public against harm from products which might prove dangerous to health and from fraud on the part of unscrupulous sellers of products. Efficient enforcement of the Act, in addition, protects the regulated industries from harm by creating greater public confidence in the products offered by these industries. Therefore, manufacturers and others gaining their livelihood from the products of these industries should be anxious to see the law enforced in a way that will bring the greatest protection to the ultimate consumers of the products of these industries.

The Federal Food, Drug, and Cosmetic Act, which in 1938 replaced on the statute books the original Federal Food and Drugs Act enacted in 1906, was enacted for the purpose of strengthening the original law. There were many weaknesses in the original law and the time finally arrived when a serious effort was made to plug these loopholes. However, as frequently happens in such cases, the original law was actually weakened in one material respect as indicated by recent action by the U. S. Supreme Court in refusing to grant a review of the Phelps Dodge Mercantile case which was decided against the Government by the U. S. District Court, which Court was sustained by the Circuit Court of Appeals.

The point at issue was whether or not the Food and Drug Administration, in the enforcement of the Food, Drug, and Cosmetic Act, could seize and condemn a product which had become adulterated *after* it had come to rest following shipment in interstate commerce. The products involved in the seizure were macaroni and spaghetti which were found to be adulterated with rodent excreta and insects. Seizure was made under section 304(a) of the Act which provides that articles which are "adulterated or misbranded when introduced into or while in interstate commerce . . . shall be liable to be proceeded against while in interstate commerce, or at any time thereafter." The contamination in this case occurred in the rodent and insect infested warehouse of the interstate consignee where the food was stored in its original unbroken packages.

Section 10 of the original Food and Drugs Act of 1906 was stronger in its language since it authorized the seizure of an adulterated food or drug which is being transported in interstate commerce "or, having been transported, remains unloaded, unsold, or in original unbroken packages." The language given in this original law reached a food or drug which had become adulterated or misbranded *after* its interstate transportation and *while* it then remained unloaded, unsold or original unbroken packages. This provision remained on the statute books of the country for over thirty years, and under it thousands of shipments of filthy, debased, and deteriorated foods and drugs were thereby prevented from reaching the consuming public.

It can be seen that the language of the 1938 Act is

not as strong as the language of the 1906 Act, for despite the fact that the 1938 Act authorizes seizure "while in interstate commerce, or at any time thereafter," this language is preceeded by the provision that a product must be adulterated or misbranded "when introduced into or while in interstate commerce." The provision makes no reference to a product which becomes adulterated or misbranded *after* it has completed its interstate transportation, although the 1906 Act does provide for this eventuality. However, the intent that such seizures be made under the 1938 Act is clearly implied by the fact that this Act declares a food, drug, device, or cosmetic to be adulterated if it is "held under insanitary conditions where by it may become contaminated with filth, or whereby it may have been rendered injurious to health." The same intent is also implied by the fact that section 301(k) of the 1938 Act prohibits any alteration (etc.) done while such article is held for sale after shipment in interstate commerce and results in such article being misbranded."

That the 1938 Act was designed to strengthen and not to weaken the 1906 Act is certain. In the Dotterweich case the U. S. Supreme Court said: "Nothing is clearer than that the later legislation was designed to enlarge and stiffen the penal net and not to narrow and loosen it. This purpose was unequivocally avowed by the two committees which reported the bills to Congress. The House Committee reported that the Act 'seeks to set up effective provisions against abuses of consumer welfare growing out of inadequacies in the Food and Drugs Act of 1906.' And the Senate Committee explicitly pointed out that the new legislation 'must not weaken the existing laws, but on the contrary, it must strengthen and extend the law's protection of the consumer.' "

It is clear that the 1938 Act does not have the seizure provisions intended for it although it is difficult to how see such a mistake could have been made. However, there is no need to cry out against the decision of the U. S. Supreme Court, but rather to get busy and see that this power is put into the Act by amendment. And since the regulated industries have not only survived but have greatly expanded under such seizure provisions during more than thirty years of the old 1906 Act, no harm can result to the regulated industries from the inclusion of the same power in the 1938 Act. The form of such an amendment has been drafted by the Food and Drug Administration and was introduced into Congress April 21. The bill provides that Section 304(a) read as follows, the words in italics being the added language:

"Sec. 304(a) Any article of food, drug, device, or cosmetic that is adulterated or misbranded when introduced into or while in interstate commerce, *or while held for sale after shipment in interstate commerce*, or which may not, under the provisions of section 404 or 505, be introduced into interstate commerce, shall be liable to be proceeded against while in interstate commerce, or at any time thereafter, on libel of information and condemned in any district court of the United States within the jurisdiction of which the article is found."

Certainly it is not the desire of the manufacturers in this industry that products properly shipped by them in interstate commerce should be so handled at some later date so that they become adulterated or misbranded. And if they are handled in such a manner, the manufacturer of them should strongly desire that they be seized by the Food and Drug Administration and thus kept from falling into the hands of ultimate consumers. For if they do fall into the hands of ultimate consumers in an adulterated or misbranded condition they can cause harm to health or death, and thus they cast a serious reflection upon the name of the manufacturer and might result in costly and disparaging damage suits.

Therefore, it would seem that the manufacturers in this industry, individually and through the associations of those who are member of associations, should get strongly behind the enactment of this amendment by Congress. The support of the manufacturers in this industry and in other regulated industries seems essential to the enactment of this amendment for the reason that Congress, at the present time, is of a mind to work away from further regulation as a result of discontinuance of the regimentation necessary during the war, and therefore might be reluctant to enact further control.

And it does not seem good business for manufacturers in this or other regulated industries to take a passive attitude toward this amendment since its enactment would very definitely prove of benefit to these industries in the long run. Rather should the manufacturers see that resolutions supporting the amendment are adopted by the associations of which they are members, and also should the manufacturers themselves contact as many United States Senators and Congressmen as possible and urge that they support the amendment. For it is a foregone conclusion that any weakness in the Act will be taken advantage of by those who are no credit to the industries regulated by the Act. The amendment would be of very definite benefit to the manufacturers since it would protect their products after they are out of the hands of the manufacturers. The manufacturer can turn out an excellent product, properly made, packaged and labeled, but he has no control over what might happen to it after it leaves his hands and is not properly stored or handled. Still when the product is eventually sold to a consumer, it is the responsibility of the manufacturer that the product then be in the same condition as it was when it left his hands. Under the proposed amendment, the Food and Drug Administration is willing to accept the responsibility of checking to see if anything detrimental has happened to the product. Manufacturers should welcome this action.

By FRAZER V. SINCLAIR

PERFUME and cosmetic manufacturers are discouraged and confused in their use of newspaper cooperative advertising. The shortage of newspaper space, the widespread bidding by manufacturers for more space than the store possessed, has distorted mutual values. New habits, acquired by many stores, will only break down under pressure of changing business conditions.

Cooperative newspaper advertising, from its beginning in 1902, has been condemned by some manufacturers, as stoutly defended by others. The study of the Association of National Advertisers lists 195 reasons why it can be used to advantage, 145 reasons why it may be of negative value to manufacturers.

The truth is that newspaper advertising, in cooperation with a retailer, should be considered as a highly individual problem in sales tactics. Its value involves such questions as: what manufacturer, what store, when and why? Any attempt to generalize, even within one industry and one type of distribution, must miss some of its real virtues.

Over the past three years there has been appalling and extravagant waste in cooperative advertising. Old established manufacturers, as well as new ambitious advertising spenders have largely let control of this advertising get away from them. This carelessness has emphasized the faults always inherent in cooperative advertising.

As a result, leading stores now demand and receive almost universally, not only full space cost but usually production cost. Manufacturers can rarely have a voice in selection of the newspaper or date of insertion. Store cooperation, so largely the justification for this form of advertising, is still a haphazard procedure in most stores.

Legally conscious manufacturers have discovered even greater waste and hazards. Last year several such manufacturers sent advertising contracts to all retailers handling their products. These contracts committed the manufacturer to pay full price for dealer advertising of their product, or a contributing share, up to ten per cent of sales.

This produced a brief epidemic of the weirdest assort-

ment of advertising to be seen on last year's extravagant stage.

Many small stores with no history of advertising, that is no following of advertising reader interest such as large stores possess, burst into a few insertions of 28 or 56 lines for these elect manufacturers. Some of these stores, sectional or local in their trading area, spent the manufacturer's money in a medium, only a small fraction of whose readers would conceivably travel to the store's neighborhood to trade.

But the newspaper clippings which flowed into the advertising departments told another disturbing story. Stores, in any pattern of distribution, vary in prestige and reputation, both with the public and other retailers.

This pattern of distribution for a manufactured product, as the public becomes aware of it, is an important, perhaps the most important determining factor in building product prestige and distinction. For this reason, cooperative advertising, which declares so clearly the mutual association of store and manufacturer, must bear the responsibility of clearly defining to the public and other retailers, the pattern of distribution. That is why manufacturers who offer all stores the benefits of cooperative advertising watch with concern the level of this impression.

The effort to systematize cooperative advertising this year does not seem to be producing very good results. Its net result will probably be a drastic reduction in newspaper advertising. Large stores are not yet ready to talk 50-50 advertising, even for popular brands. More rigid checks in advertising departments are eliminating free riders.

And yet newspaper cooperative advertising has so many substantial values for both retailer and manufacturer that a way must be found to use it profitably.

The conventional advantages of this form of advertising are well known. They include the ability to tailor advertising to distribution; seasonal promotions; opportunity to impress stores with promotional vigor, stimulation of retail selling and cooperation; opportunity to meet salesgirls and store executives.

The newspaper itself has certain advantages for perfume and cosmetic advertising. Although it may have dense coverage in its territory, it carries the fashion

(Continued on page 716)

MODERN CREATIVE MERCHANDISING

By LADISLAS MEDGYES

Art-Director, Helena Rubinstein, Inc.

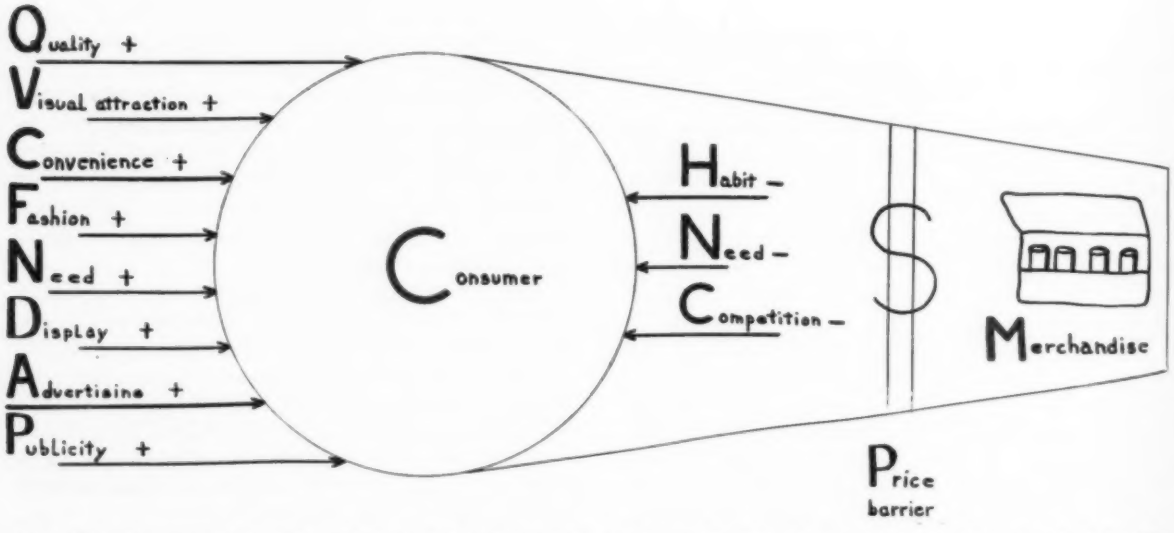
IF WE WERE to compare present day advertising with that of two and three years ago—we should be forced to believe that we are dreaming,—or that our minds are rather confused and so befuddled that they cannot distinguish between dates, because we find it hard to believe that the old magazines carry the advertisments for new things and the recent ones the ads for prewar merchandise.

This however is the plain general truth—

Houses to helicopters, to cars, to radios, to fabrics, to precipitrons came off the artists' drawing boards in military formation during the war, like an escapist counterpart of the continuous real invasion of enemy shores,—enshrined in the literary superlative of copy-writers and radio scripts . . .

The reasons for these dreams are rather simple: Industry never had so much advertising money to spend as during the war, especially as it was all deductible from a very high excess profit tax basis. Simultaneously there never was such a lack of goods to sell. What could the poor man do, whose duty it is to keep a certain name in the public eye? He recommended buying war bonds and contributing to the Red Cross, and then? He could not tell about the secret war wonders his company manufactured, so he went to the designer with that portion of a new invention, which he was able to reveal and let the designer switch on his imagination. So light metals became cars you could lift with one hand, plastics became transparent railroad car tops and wonderful streamlined and airbrushed designs were born—but still-born.

Of course some of them really exist by now. But mostly in one single sample,—the cost of which reminds me of the rather rich and prominent citizen, who, when



Topological representation of pyschological field-forces with Professor Kurt Lewin's symbols, to determine the behavior of the customer intending to buy a certain piece of merchandise. The arrows are called vectors, representing positive and negative influences, the psychological area is the enclosed field with the consumer and the merchandise separated by the price-barrier.

seeing the magnificent model of the promised Kaiser-Frazier car in aluminum and magnesium alloys, with a tiny motor developing tremendous power, exclaimed: "Gentlemen, I want the first one of these magnificent modern cars; here is my check, what sum shall I make it out for?" "One million two hundred and fifty-two thousand seven hundred and ninety-eight dollars, please" was the answer. It was all hand-made.

A man built himself an office and a desk, which served meals at the push of a button and projected moving pictures of the gentleman's products on a screen which appeared from nowhere. I am not sure whether his feet were lifted on the top of the desk electronically when he felt tired.

A high frequency wave tube really cooks hot-dogs and was even incorporated into a slot machine which cooked it at the instant you dropped your coin in the slot. This little item was supposed to be ready for the market over a year ago and the company making it was tipped on the stock-exchange as one of the great post-war boom participants. I almost bought some stock in it myself, but decided not to, as they would not accept my suggested improvements. I insisted that they incorporate a loud speaker asking you: "Mustard, Please?" You had to answer yes or no, and that is how you got it.

There is nothing scientifically impossible in this. There are thinking machines which accomplish much more than that. Thank God, they were never advertised for common house-hold use, where thinking is a secondary function anyway. But where are the automatic dishwashers? Where are the houses stamped out of aluminum? The revolutionary FM Radios? The Television programs? As far as the consumers are concerned, still on the glossy pages of old magazines.

The lipstick quartet represents a merchandising idea without inventing a new material or instrument.

And maybe by the time they will come out to the market, all the excitement will have died down. Something went wrong with the timing between dreams and production. If a merchandiser had had his finger in these plans, I doubt if it would have happened.

Because a merchandiser has to be a better prophet than a visionary artist or scientist. Because merchandising is also an art, not only a sort of prophetic science. Not only does the merchandiser invent, the same way as our advertising artists did during the war, but invents something that he believes will be wanted and bought by the consumer, at the time it will be put on the market.

Evidently then, the merchandiser is a very complex

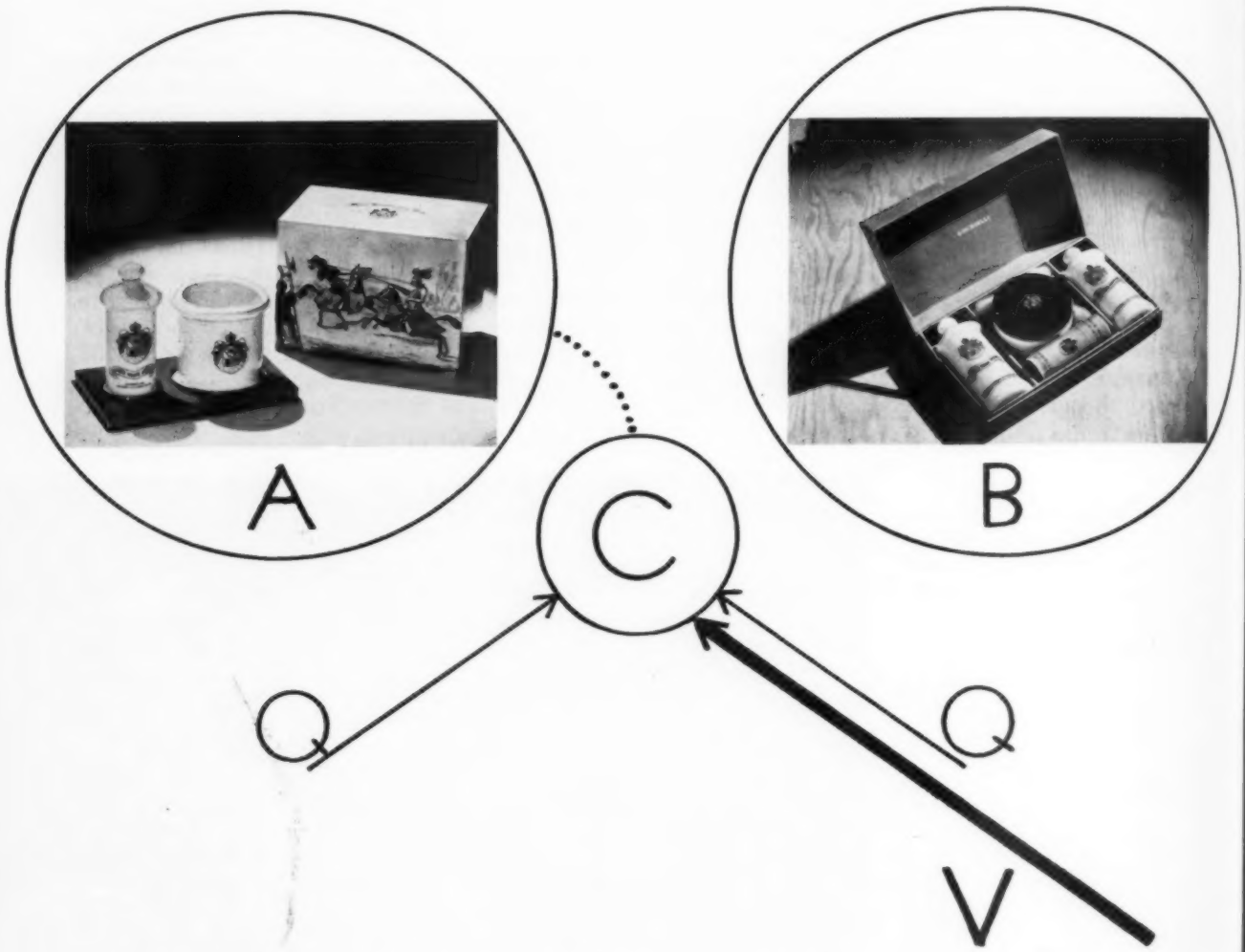
This show-window, designed by Martine Kane, shows the five color-spectographs of fashion and make-up colors for blondes, red-heads, medium-browns, brunettes, and silver-grays.

personality with more than one arrow to his or her bow. The qualities of an inventor, prophet and buyer and salesman and even advertiser should all be present to build up the character of the merchandising man. Because not only does he create the merchandise, but also the means and modes and ways to put it on the market in such plausible way, that the buying public will believe it has been breathlessly waiting for just these goods at just that time.

The human eye, not all of them equally, can distinguish between several hundred thousand shades of colors; an expert artist will pick out a color, which he thinks is beautiful for a certain purpose. What is the fate of this color in the process of merchandising? It goes through the critical eyes, usually not too artistic eyes, of a commercial organization, most of whom, will resist a novel choice, most of whom will look for precedents more enthusiastically than a lawyer, most of whom will say, that color X sold well in 1937, in 1942, and in 1944, why would it not sell well in 1948? Our color N, E, W, new, has never been tested on the market. The manufacturing plant will kick; the color cannot be mixed, it has to be experimented, it is too expensive to make—at the end it will not match the artist's conception.

The advertising agency will throw fits, the color does not go with their favorite model's hair, the magazines will not be able to reproduce it, it does not lend itself to inspired copy. The buyers of stores and plants will look at it with their hearts torn between what they like and what they think the consumer will buy. And you, the final buyer, will hesitate whether to follow your own taste, the recommendations of House Beautiful, the

(Continued on page 717)



Represented by the symbols of topological psychology, C is the consumer who is pushed equally towards product A and product B, which she knows through previous experience, hearsay, or advertising claims to be equally good. Let's call these vectors Q for quality. B is packaged unattractively, A beautifully. A powerful Vector V for visual attraction will push the consumer inevitably towards product A, which she will finally buy.

MODERN OINTMENT BASES

By M. A. LESSER

The task of producing better and more efficient ointment bases has been tackled by many workers. Cooperation between the cosmetic chemist, the compounding pharmacist and the physician has resulted in the formulation of many improved products for topical medication. While the ideal base is yet to be developed, such combined study has provided the dermatologist and others with materials to treat various conditions and to meet different requirements. Most of the newer ointment bases are far superior to those obtainable only a few years ago.[1]

As was pointed out recently by Lane and Blank,[2] a vehicle for topical dermatologic therapy has many functions to perform. The most important are as follows: (a) It carries a drug to the skin and holds it there; (b) It influences the penetration of a drug into and through the skin; (c) It alters evaporation from the cutaneous surface; (d) It alters the texture of the skin; (e) It protects the skin; and (f) It aids in the removal of cutaneous secretions.

Of course, ointments and creams comprise only one major class of products for local dermatologic therapy. Lotions, suspensions, jellies and powders are widely used for treating skin conditions, but none have received as much attention or are so frequently employed as the ointment preparations, Since they serve primarily as carriers for active drugs, considerable study has been devoted to the ability of ointment bases to permit transfer of the active ingredients from the vehicle to the skin.

With most ointments, the aim is to secure a superficial or surface action from the medicinal ingredients. Often, however, a certain degree of absorption into the tissues is desirable. The value of systemic absorption in the treatment of purely local conditions is, of course, a moot question. The problem of penetration and absorption of drugs from ointments has been studied by many investigators during recent years.[3-8] Unfortunately the results have been varied and at times rather conflicting. This is attributable to the many, varied methods that have been employed to measure the level of pentration, the degree of absorption and the medicinal action of drugs contained in different bases. While there is a real need for some standardized technic for determining these important actions and effects, it is generally agreed that the work already done has yielded much valuable information.[9, 10]

Other factors influencing the action of ointments have received critical examination. For example, indicative work has been done on cutaneous reactions and the effect of pH on medicaments contained in ointment bases. Work done by Pillsbury and Shaffer[11] showed that the pH of the skin, though definitely on the acid side, varies appreciably in different parts of the body as well as in different individuals. It is quite probable that the "acid mantle" of the skin performs important protective functions and that the prolonged application of highly alkaline ointments or creams may have deleterious effects. It is well known, for instance, that many pathogenic bacteria and fungi are very sensitive to acids, but grow abundantly in a slightly alkaline environment.[12]

In England, Harry[13] pointed out the important role played by pH in the defensive mechanism of the skin. He suggested that preparations for dermatological use be controlled to a pH near that of the normal skin (average pH 5.4) except when necessary to correct pathological conditions. He recommends the use of citric acid and sodium phosphate as buffers in such preparations. In this country, other workers[14] found that when certain ointments carrying antibacterial agents were buffered they exhibited greater germicidal action than unbuffered ointments.

Especially noteworthy is the work done by Sulzberger and his associates[15] to develop standard procedures by which dermatological preparations can be comprehensively tested for efficacy and potentially harmful effects. The principal steps in these procedures are as follows: (a) *In vitro* determination of the ability of the vehicle to deliver the active agent as required; (b) Rapid preliminary estimation of the degree of irritancy of the vehicle and the active agents on human skin; (c) The actual testing of the different agent-vehicle combinations for their relative efficacy for the purpose intended; (d) Extensive testing of the complete medication for irritancy and allergenic qualities on human

volunteers; (e) Evaluation of the effect of aging, of temperature, of the container, etc. on all the above factors; and (f) Evaluation of other factors, such as suitable packaging and general acceptability of the end product to the user.

These and other investigations have yielded considerable valuable data which, when sifted and organized, may lead to the development of the ideal ointment base. The standards for such a base have been listed on a number of occasions.[16, 17] Although differing somewhat in detail there is remarkable unanimity of opinion regarding these requirements. Indicative are the following requirements as listed by Prinz and Ereaux,[12] for an ideal ointment base: (a) It should be chemically inert, that is—it should not irritate the living tissues, show no incompatibilities, and should not decompose through contact with air, water, or secretions; (b) It should bring the active drug into intimate contact with the diseased tissue; (c) It should create such conditions on and within the epidermis as is desired, particularly as regards the pH, the moisture content, and the fat content; (d) It should be easy to prepare as a constant composition; and (e) It should be easy to remove, preferably with plain water, from the skin and clothing.

Obviously, fatty and greasy bases do not approach these standards. For centuries, greasy bases consisting of animal or vegetable fats held undisputed sway in the treatment of skin disorders. Today they find but little use in dermatology. Benzoinated lard, for example, is no longer used because it has no special virtues. Moreover, it becomes rancid, and therefore irritating, rather readily.[18]

The introduction of petrolatum helped to start the older types of fatty bases on their way to the therapeutic limbo. When it was first used, petrolatum seemed to be an ideal vehicle for applying drugs to the skin. Showing good adhesion and affording physical protection, it is absolutely inert, not affected by air or water, or by acids or alkalies. Petrolatum was also found to have two other valuable properties; it showed no incompatibilities and, unlike animal and vegetable fats and oils, displayed no tendency toward rancidity.[12, 18]

Only after years of employment as a favorite ointment base was it realized that petrolatum displayed characteristics that often outweighed its several advantages. Dermatologists began to appreciate that, except in the case of an oily, intact skin, drugs incorporated in petrolatum do not get into intimate contact

with the tissue. Hence, maximum therapeutic effect is not attained. Moreover, petrolatum is not absorbed by the skin and does not mix with the aqueous secretions and exudations. In addition it prevents the evaporation of moisture and the access of air to the skin, thereby interfering with the normal skin functions of perspiration and exudation. As remarked by Witt,[19] in the case of exudative dermatoses, this "blanketing" effect prevents the escape of pus and permits bacterial multiplication under the ointment layer, with consequent aggravation of the pathological condition.

Such bases also lacked popularity because they were rather difficult to apply and remove. Generally messy and with an unfortunate tendency to stain clothes and bedding, the use of petrolatum-based ointments was often a major cause of lack of cooperation between patient and physician.[20]

Realization of the inefficiencies and disadvantages of greasy bases paved the way for the development and acceptance of modern emulsion bases. It has been demonstrated repeatedly that emulsified ointments offer distinct advantages over the older, non-emulsified types. Better able to achieve complete contact with the skin, emulsion bases are able to carry both fat soluble and water-soluble medicaments and transfer them readily to the diseased area. Usually of a more creamy consistency, the emulsified ointment bases are easy to apply, spread readily and show good adherence without clogging.[19] Aside from the fact that emulsified ointment bases show less interference with the physiological processes of the skin and are cosmetically more acceptable to the patient, they are also superior with regard to therapeutic effectiveness. For example, better results are secured with bacteriostatic or bactericidal agents when they are incorporated in emulsion bases.[21]

An emulsion is formed when two ordinarily immiscible liquids are mixed and the mixture made stable by the addition of a third substance called an emulsifying agent. In most emulsions, one of the liquids is water and the other is referred to as an oil. Since either of the liquids can be dispersed in the other, two immiscible liquids can produce two types of emulsions. If the water is dispersed in the oil, a water-in-oil emulsion is formed. Conversely, if the oil is the disperse phase and the water the continuous phase, an oil-in-water emulsion results. The type of emulsion produced is not primarily dependent on the relative amounts of water or oil present, but is determined by the type of emulsifying agent employed.

While showing some basic similarities, there are certain definite differences in the characteristics of the two types of emulsions. These differences are important when dermatologic applications are considered. Water-in-oil emulsion bases achieve close contact with the skin and are especially valuable on greasy surfaces. They are miscible with the fatty secretions, but are capable of emulsifying the aqueous secretions. They neither defat nor dehydrate the skin. In general, water-in-oil emulsions form protective and emollient bases. They are suitable as carriers for water-soluble drugs for application to abraded surfaces where a slow, steady release of the medicament is desired, and for oil-soluble agents for application by friction to intact skin. The chief disadvantage of such bases is that they are somewhat greasy and require soap and water for removal.[19]

Certain metallic soaps, and various fatty amides, secondary amides and alkyloamides have been used to make water-in-oil emulsions.[2] In the main, however, such bases are made with sterols and sterol esters, such as are found in wool fat. Lanolin has long been used in the manufacture of ointment bases, but it is now well-established practice to use the more active components of this material, either in combination or singly.[22]

In England, the active emulsifying materials in lanolin are separated from wool fat by saponification to yield the official wool alcohols.[23] Two official British ointments are prepared from this substance, but a number of other ointments may be made with the wool alcohols. Illustrative is the following water-in-oil emulsified base suggested by Chamings:[24]

Wool alcohols	3 parts
Hard paraffin	10 "
Soft paraffin	37 "
Water	50 "

This obviously is very closely related to the modern absorption bases now widely used in dermatologic therapy in this country. So called because of their ability to absorb large quantities of water, these absorption bases are available under a number of trade names. Essentially they consist of cholesterol, oxycholesterol and their esters, and other purified fractions of wool fat, with or without added lanolin, combined with petrolatum and other paraffin products. They form odorless, stable ointment bases that are compatible with most drugs. They are especially noteworthy for their ability to emulsify considerable quantities of water or aqueous medications.[20, 25]

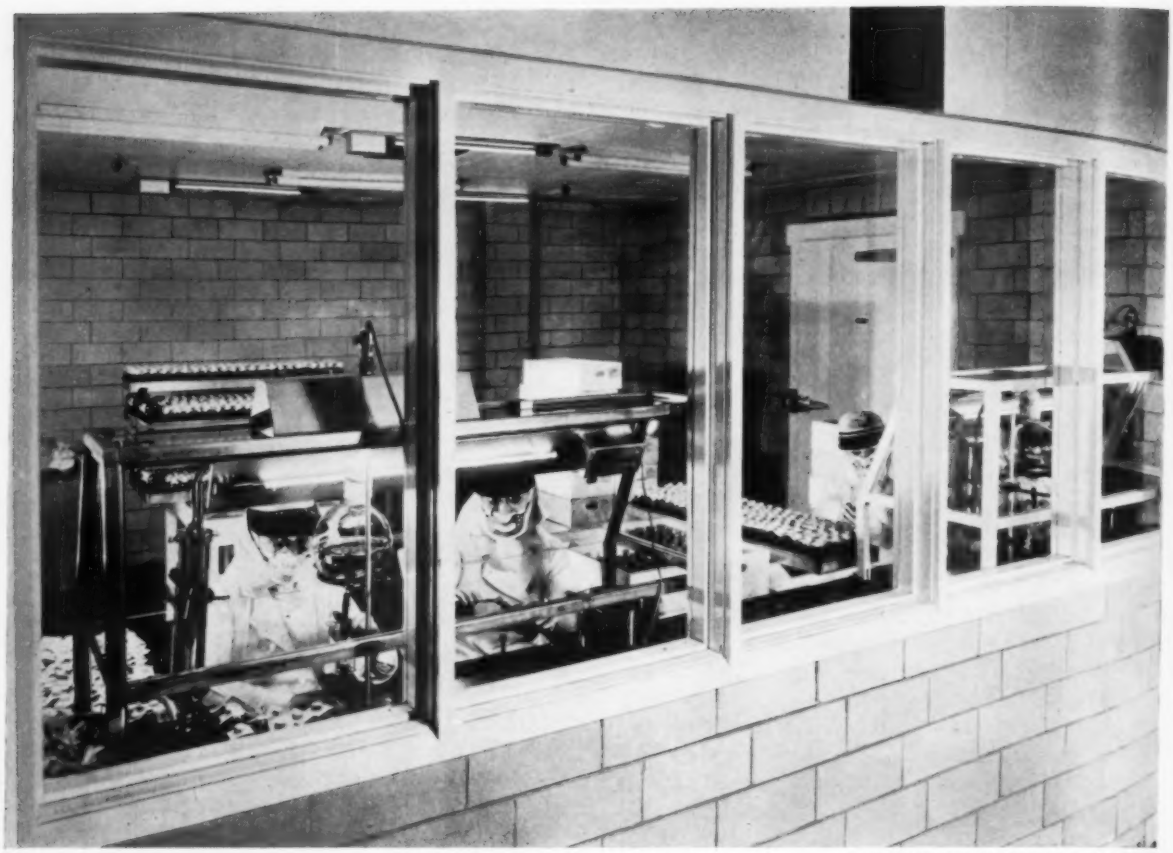
Sometimes known as hydrophile ointment bases, a number of formulas for making absorption bases are available. Interesting and indicative is the following base developed by Johnston and Lee[26] and found to possess many superior qualities, especially with regard to compatibility and stability:

Cholesterol	3 Gm.
Cholesterol stearate	3 "
Anhydrous lanolin	25 "
White petrolatum	69 "

More recently another water-absorption type of ointment has been proposed[27] for inclusion in U. S. P. XIII under the title "Hydrophilic Petrolatum." Anhydrous, but capable of mixing with water or most aqueous solutions, the base consists of:

Cholesterol	10 Gm.
Stearyl alcohol	30 "
White wax	80 "
Wool fat, anhydrous	150 "
White petrolatum	730 "

(Continued on page 712)



COURTESY FREDERICK STEARNS & CO. DIVISION

Filling of sterile solution of amino acids mixtures for parenteral use.

AMINO ACIDS For Medicinal Use

By CHARLES F. KADE, Jr., Ph.D.*

THE work of Rose and co-workers has demonstrated that the human being must obtain a daily supply of at least the eight indispensable amino acids in order to remain in nitrogen equilibrium. The National Research Council has recommended that the normal individual obtain daily not less than one gram of protein per kilo of body weight for adequate maintenance. However, in sickness the demand for amino acids may be greatly increased (3, 4, 6). Since the malnourished or ill may be unable to obtain or absorb sufficient amino acids from food, some readily available supply of amino acids must be furnished.

In oral feeding of those patients who can digest protein, it is not necessary that the amino acids be free, but only readily liberated by the gastro-intestinal tract. However, for individuals lacking the necessary ability to degrade protein, the amino acids must not be bound.

There are many clinical cases wherein better protein feeding than can be obtained from ordinary diets is indicated. In only a small proportion of such cases will parenteral feeding be necessary. However, in many instances, either because of the large quantity of protein which the clinician feels should be administered or because of faulty digestion, it is impractical to feed the

*Director of Biochemical Research, Frederick Stearns & Company Division of Sterling Drug, Inc. Presented before the Division of Medicinal Chemistry at the American Chemical Society, Chicago, Ill., and released for exclusive publication in this magazine.

patient with ordinary foods. In such subjects, the administration of purified protein digests or amino acids makes possible a high amino acid intake and absorption with a relatively small bulk. Such material can usually be given orally or rectally depending on the state of the patient. However, in those cases where sufficient amino acids cannot be given by the oral route, such as pre- or post-operatively or when the quantities indicated are larger than the appetite of the patient or persuasive powers of the doctor, parenteral administration is of value.

The preparation of a mixture of amino acids designed to nourish those who are unable to obtain sufficient quantities of proteins from food, but are able to absorb nitrogen administered by the oral route, involves two mutually dependent problems. First, what should such a product consist of, what specifications must be met; and secondly, how can a mixture be prepared with these characteristics?

Thus, what are the desirable characteristics of a preparation for oral use?

(a) It must be a good source of the essential amino acids.

Often there may be no other source of amino acids in the diet and the utilization of the material will depend on having *all* the essential amino acids present.

(b) The amino acids must be readily available.

The indispensable amino acids must not be bound in such a way that they cannot be liberated or absorbed as occurs in such proteins as keratin.

Even though the amino acid content of a product may offer all the essential amino acids in good proportions, unless they are absorbed by the animal and made available to the cells, they cannot be utilized. Thus the rate of liberation from a protein and the order of liberation will have considerable effect on the biological value of the material.

Ordinarily, the digestive powers of the intestinal tract, even if reduced will be sufficient to degrade proteins to their constituent amino acids, and absorption will take place. However, there are some instances, such as the patient who had all but a few feet of his intestinal tract removed; wherein the power to split proteins is lost almost completely. In such instances, feeding can only be accomplished with materials ready for absorption. Thus the essential amino acids must not only be present, they must be readily available.

(c) The proportion of amino acids present should be such as to be of value in the nitrogen metabolism of the human being.

Even though all the indispensable amino acids may be present, the utilization of the material will be governed in part by the relative proportion of the amino acids presented to the cells. The essential amino acid present in the lowest proportion to its quantitative requirement will govern the utilization of all the amino acids. Thus, if one of the indispensable amino acids is very low in comparison to the amount required by the body, the great excess of other amino acids cannot be utilized. Just what these correct proportions are, is, of course, a very complex problem. W. C. Rose and his group have made a very important start in determining these values, but he has called attention to the fact that abnormal conditions may change the requirements. Thus, today it is necessary to rely on tests which will show that the essential amino acids are present in good quantities and that animals can be maintained in positive nitrogen balance or will grow.

Modifications of two general methods for evaluating proteins have been widely used. Either ability to promote growth such as measured by the Osborne, Mendel and Ferry Procedure,[10] or the amount of nitrogen retained as determined by Mitchell's modifications of Thomas' method, is most frequently employed.

The Osborne, Mendel and Ferry method was designed to compare the value of proteins in promoting growth in the rat, at the optimum intake. Later workers used an arbitrary intake of 10 per cent protein in the diet as optimum. This does not give maximum protein efficiency, but the values obtained have some meaning and will differentiate between mixtures of high and low biological value.

The data shown in Table I is an example of the comparison of the protein efficiency of mixtures of lactalbumin and casein as determined by the Osborne, Mendel and Ferry procedure. It is interesting to note that casein is only about 70 per cent as efficient as lactalbumin, and that as long as the ratio of lactalbumin to casein is between 40-60 per cent, there is little or no difference in the protein efficiency.

TABLE I

Determination of Protein Efficiency of Mixtures of Casein and Lactalbumin by the Osborne, Mendel and Ferry Method

Protein Mixture		*% in Diet*	*Gain/gm. Protein*	*Relative Efficiency*
Lactalbumin	*Casein*			
100%	0	6	3.31	100
70%	30%	6	3.12	94
60%	40%	8	3.02	91
50%	50%	8	2.95	89
40%	60%	8	3.00	91
30%	70%	8	2.71	82
0%	100%	8	2.42	73

Bosshardt, Ydse, Ayres & Barnes[2] have adapted this method to mice. In this manner results are obtained in much less time and with the added advantage of consumption of smaller quantities of material.

Thomas originally defined the biological value of a protein as the ratio of nitrogen retained to nitrogen absorbed. Mitchell and co-workers revised the procedure making it practical to evaluate proteins by this method. In this case, accurate nitrogen balance under several conditions is measured[8, 9]

Allison & Anderson[1] working primarily with dogs have modified a method of Cowgill & Melnick which gives accurate, reproducible biological values. By

(*Continued on page 708*)

Readjustment Period in the Cosmetic Industry

As in the Period After World War I Cosmetic Companies Are Adjusting Themselves to a More Normal Basis

Talk about a recession continues to increase in volume. Certain industries are feeling the effects of over-production due to a speed-up in manufacturing and due to a greater number of companies operating in these industries as the result of the abnormal wartime demand. The cosmetic manufacturers have been having their troubles this year as demand declined and stores tried to move their inventories. The radio industry is over-produced and layoffs in radio manufacturing plants have been quite extensive. Other industries are in a similar condition. The reason is not far to seek. People have been accustomed not to be able to buy the things which they needed. So when they saw them available at any time during the period of general shortages, they bought them immediately and took them home. Generally speaking they hoarded. Now they go into stores and they see in profusion any number of things which they could not buy before. They see no reason to buy more than their immediate needs of these things, and quite often they are still using up the supplies of these things which they hoarded during the time of general shortages.

Things are returning to what may be considered more normal conditions and the transition is not without pain just as the transition from a peacetime basis to a war basis was not without pain. Certainly the rate at which business was going on in the past years was abnormal and a change was certain. The only uncertainty in anyone's mind was just when the swing would come and how far it would go. There are still shortages in many lines and paper is one of the very worst. We know this from our own difficulties. In addition one has only to watch the housewives grab up the good grades of toilet paper or paper toweling when they make their appearance in chain stores. Automobiles are still short but the experienced manufacturers are advising their sales staffs to get ready for real competitive selling after about a year's time. Housing is still very short but costs are too high to enable builders to relieve this shortage at a profit or as a means of sound investment. Therefore, the turn is now in motion but it has not by any means run its course.

Naturally the industries which are the first to feel the effects of a recession will be the first to recover from it. This is for the reason that they and their distributors will be forced immediately to curtail their inventories and the manufacturers will be forced immediately to curtail the rate of their production activities. If they are managed intelligently, companies in these industries should be able quite rapidly to adjust themselves to a more normal basis. No one in his right mind who had been through the postwar period following World War I expected conditions to continue as they were. And therefore those companies headed by men who went through the period following World War I are in a position to benefit materially from this previous experience.

The cosmetic manufacturers generally are trying to work down their inventories of raw materials, containers, and finished goods to a point more in line with what they anticipate the volume of business will be in the immediate future. Some purchasing agents tell us that they are maintaining inventories on a thirty day basis where possible. After inventories of both wholesalers and retailers are worked down to a normal basis,

and as the goods in the hands of ultimate consumers are used up, business will begin to flow on a normal basis. One must realize that in a recession business does not stop entirely, it merely slows down at a rather sharp rate for a time, after which it improves to the point based upon the disposable income of the people of the country. The slowing down is generally rather abrupt for the reason that manufacturers, wholesalers, and retailers keep producing and stocking at an increasing tempo until such time as the flow slows down and the supply lines are clogged. After that happens, only time alone will clear the lines. This is what must occur in this industry.

Naturally there will be talk of the slow-down affecting some lines more than others. There will be reason given for a lower dollar value of sales such as people swinging from the higher priced lines to the lower priced lines. But as a matter of fact all lines will be affected to some degree. One of the largest manufacturers of creams in the medium priced ranges, who has not raised his prices through the war or after the war, has felt the slow-down very materially. Doubtless as business is resumed after the supply lines are cleared, many people not earning as much money as they did previously will switch from higher-priced lines to lower-priced products. But this cannot be given as a general rule. And further it is not known to how great a degree people swung from the lower-priced lines to the higher-priced ones during the lush period. Probably this type of swing occurred more when the cosmetics were bought as gifts, than when they were bought for use by the purchaser.

The greatest break in sales should be expected to occur in those companies which have not been long established and which sprung up only because of the abnormally heavy wartime demand. But here also there will be exceptions to the rule in newer companies with goods products and highly intelligent management who will be able to weather the storm. After all, the wartime period of heavy demand was a time when one could get a toehold in the industry since retailers were anxious to get enough goods of any sort to supply the terrific demand. And if any particular companies who entered the industry in this way have delivered goods of excellent quality and good consumer acceptance, and if the policies of these companies toward the distributors have been such as to create real friendly relations, they can be expected to continue to do fair business during the slack period.

There can be no doubt that the twenty per cent excise tax on cosmetics is in large measure responsible for the suddenness of the break in cosmetic demand, and until that tax is removed, manufacturers and distributors of cosmetics will not be in a position to build their businesses to the point at which it should be in relation to the disposable income. For after all, cosmetics are in a large part a gift item, and people buying gifts for others have a certain amount of money to spend on these gifts and they want to get as much as they can for this amount of money. If a class of products carry a twenty per cent sales tax, certainly people are reluctant to purchase them for gifts.

The break in cosmetic demand started with last Christmas when retail outlets did not sell anywhere near the volume of cosmetics which they expected to sell. Retail drug stores which had been accustomed to a very heavy demand for cosmetics as Christmas gifts, wound up with enormous stocks on hand after Christmas had come and gone. Then came the requests from retailers that manufacturers take back large quantities of this merchandise. Manufacturers generally have had an abnormally high percentage of return goods that have to be salvaged in some way. Many of the Christmas sets had to be broken down and repackaged as individual items which could be returned to regular stock. Many of the manufacturers have taken such steps as they could toward the salvage of these goods and, having cleared the decks of this material, they are laying their plans for gift goods to be offered for the 1947 Christmas gift market. This is the only wise thing to do. There is no use postponing action, and there is no use trying to dispose of these goods in any other but a normal and proper way.

Cosmetic manufacturers have nothing to worry about regarding the place which the industry occupies in the national economy of this country. For when the time of recession passes, manufacturers will probably find that the volume of business done by the industry will climb back and surpass the peak figures recorded last year. Cosmetics have obtained a wider market in this country from the viewpoint of the number of people who are users of cosmetics, and it has also obtained a wider market from the point of view an increased appreciation of a wider range of cosmetic preparations. Just as the market for cosmetics expanded very greatly for the same reasons following World War I, so a similar expansion can be expected to follow World War II after the postwar readjustment period has passed and things return to a more normal basis.

Cosmetics are an essential part of the American scene and of the scene of most of the world as well, and American cosmetics are generally conceded to be the finest which are produced anywhere in the world. Therefore, there is no reason to sell the cosmetic industry short because of a temporary lull caused by a period of readjustment.

AMPUL PROBLEMS

By JOSEPH F. GREENE*

AMONG DIFFICULTIES, real or imagined, which have been found in ampuls, the first question is the glass itself. Fifteen years or so ago, it was frequently stated that particles in ampul solutions were caused either by reaction of the glass on the solution or reaction of the solution on the glass. In the one case, a precipitate was caused in the solution by alkali or other materials extracted from the glass. In the other case, the attack of the solution on the glass produced flakes or needles, sometimes called "spicules."

Some of these complaints were justified. Therefore, the durability of our own ampul glass was increased until a composition was reached which was completely satisfactory. For eleven years we have met no *proved* case of particle formation due to reactions between the glass and solution.

During the past few years, the activity of the Food and Drug Administration has caused pharmaceutical manufacturers to inspect their products more carefully, and in some cases they have again felt that the particles were due to a reaction between glass and solution. We have found in every case investigated so far that the particles found were particles left on the ampul wall after an inadequate washing. When the ampuls were washed thoroughly, the particles did not appear. There are several causes of particles in ampuls, but we do not think lack of glass durability is one of them.

The next difficulty which is sometimes cause for complaint is "greasy" ampuls. After the ampuls are filled and sealed, inspection shows that they have a greasy appearance inside. The solution does not wet the ampul uniformly but leaves the glass in a splotchy manner. We have never tracked down a case of greasy ampuls to grease in the ampuls shipped. The last operation before packing ampuls in the glass factory is to pass them through an annealing furnace where they are gradually heated to 1100°F, held at that temperature for about 15 minutes and then slowly cooled. If there were any grease in the ampul at this stage it would be burnt out. We have found several causes of greasy ampuls which existed in pharmaceutical plants.

Distilled water may be slightly greasy. If the raw water carries grease from the pipes (especially new pipes), it may accumulate in the storage tank. Therefore the storage tank should be investigated if one is used. If the raw water is contaminated by grease, it may distill over with the steam and contaminate the distillate. If the compressed air used for moving water is contaminated with grease, it may contaminate the distilled water. Finally, air used to blow out ampuls may carry some oil from the compressor.

A minute amount of oil or grease in water or air will produce ampuls with a greasy appearance. The remedy with water is to have all pipe lines cleaned before installation, and not to use greasy compounds on elbows, valves or other fittings. Air for moving water or for blowing ampuls should be drawn from a pressure tank equipped with a bleeder cock to permit occasional removal of oil from the tank. The air should then be passed through a fine stone filter and then through a filter packed with cotton. The cotton filter should be followed by a stone filter to catch fibers from the cotton. The compressor must be lubricated, but it should not be flooded.

The next contaminant of ampuls is fibers. Most plants, including glass plants, have fibers floating in the air. Additional fibers are picked up from the ampul boxes and paper sheets in the boxes. So when the ampul arrives at your plant, it already carries a quota of fibers. A good washing will remove these fibers. Additional fibers may be in the air of the pharmaceutical plant. They come from wood floors, cardboard boxes, and other packing material, and from the clothing of operators. A reasonable degree of control can be obtained by isolating clean ampuls until they are filled and sealed from those sections of the plant in which boxes or cartons are stored or handled; and by using floors of asphalt or rubber tile. There is a magnesium cement floor which offers good resistance to abrasion. Water and air need to be well filtered. Operators should be discouraged from wearing fuzzy sweaters, and preferably should wear a garment of smooth cotton. I know one plant (not a pharmaceutical plant) where it is desired to keep fibers to the absolute minimum. In this plant the operators wear a nylon garment from head to foot.

The air in the department handling cleaned ampuls is preferably supplied from a system which cleans it of fibers and dust. The department should be under a

*Director of Research, Kimble Glass Division Owens-Illinois Glass Co. Abstracted from a talk delivered before the Parenteral Drug Association, April 18, 1947.

slight pressure so that the air movement at doors is out rather than in.

Some fibers are easily spotted by ampul inspectors. Other fibers are broken down so much that they do not have the characteristic long slender shape. Some of these degraded fibers have a general appearance similar to glass particles as shown in the next slide. To fully identify them, they must be removed from the solution and examined under a microscope. Then their characteristic structure can be observed. I do not suggest this as a routine test, but rather as a method of procedure where a large number of such particles are encountered.

The Tuf-Top ampul, a new design developed by Kimble Glass Division of Owens-Illinois Glass Co., is characterized by a large flaring opening. Tests under actual conditions of use have shown the comparatively heavy glazed rim to be highly resistant to chipping.

We now come to particles. The principal ones are as follows: Precipitates from unstable drugs, Moulds, Glass, Dust. Of the first two types I shall say little. There are some solutions which will precipitate in any container. We have occasionally transferred such solutions to containers of fused quartz, which is most resistant, and found that a precipitate still was formed. As for moulds, they are accidents which occasionally take place.

Glass particles are formed in every operation in tube or ampul manufacture in which cutting or breakage takes place. They may be formed by breakage in transit or by breakage in the pharmaceutical plant. We have attempted to minimize the number of glass particles in the ampuls by two general methods:

First, wherever possible we have eliminated breakage or mechanical cutting of tube or ampuls; Second, we are carrying out a program of strict cleanliness, of preventing, as far as possible, the entrance of glass particles into our ampuls. We have made dust examinations for kind, size, and number in all stages through which an ampul passes. In each of the ten manufacturing operations, we have acted to decrease the incidence of particles. We are not done yet, but we know we have achieved results.

One of the important results achieved so far is to greatly decrease the type of glass particle which is partly fused on the ampul wall. A particle which is fused tight is safe. It will stay put. A particle which is loose can be washed out. But a particle which is partially or lightly fused on the ampul wall will resist a reasonable washing procedure but come off later. These are much fewer

(*Continued on page 710*)

LARGE VOLUME PRODUCERS

must have SPEED plus DEPENDABILITY in wrapping machinery

Makers of America's leading packaged products have invested more money in Package Machinery Company wrapping machines than in all other makes of wrapping machines combined.

Write for our booklet "Sales Winning Packages"

PACKAGE MACHINERY COMPANY, Springfield 7, Massachusetts
30 Church St., New York 7 • 111 W. Washington St., Chicago 2 • 101 W. Prospect Ave., Cleveland 15
849 Marietta St., N. W., Atlanta 3 • 509 17th St., Denver 1 • 443 S. San Pedro St., Los Angeles 13
320 Market St., San Francisco 11 • 18 Dickens Ave., Toronto 8

PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

PACKAGING and SELLING

TWO THOUSAND YEARS OF MEN'S TOILETRIES

It often happens that a product which becomes too popular too quickly soon fades out with the same rapidity. Most people view with suspicion a too rapid growth, have an uneasy feeling that there is something unsubstantial about it, that it might turn out to be a fad and prefer the slow steady growth that is the basis of most permanent successes.

That is probably why there is so much talk today about the market for men's toiletries, and why the psychology of a "flash in the pan" is appearing in many sections of the retail trade, and even among some of the manufacturers of men's toiletries. There unquestionably has been a recent feeling as to whether these products so romantically publicized during the war will remain a permanent part of the cosmetic industry. The reason for this feeling can be laid right at the door of the manufacturers of men's toiletries and the super-duper enthusiasm of the magazines and newspapers who were receiving an increasing volume of advertising from this part of the trade.

Few commercial products have received the glittering publicity that was extended to men's toiletries during the last two years. Most consumer magazines, including Time, Fortune, Life, Colliers, Esquire and numerous others together with many important newspapers piled on the bandwagon with glowing stories of this wonderful new development in cosmetics. These articles were received with gratification by the manufacturers of men's toiletries, who even began to think of themselves as great pioneers, the inventors of wonderful new products for the gratification of the finer life for American men. No wonder the aftermath of this glittering and abundant publicity should be a reaction which included the suspicion that these products might after all be a "flash in the pan."

The blunt truth is that nothing could be further from the actual facts. Not only were these products not new, they are as old as cosmetic history. In every age from the most primitive to the most cultivated society, men have used some form of personal decoration, which included products that could be called cosmetics. In Europe at the time of our American Revolution, and as a matter of fact in the social circles of our own country, cosmetics were more widely used by men of the wealthy, leisure class than they are today.

In the period between the two world wars and before these new class cosmetics, which received all the publicity of the men's toiletries field, were born, toiletries for men had reached a volume exceeding 20 million dollars.

Back in 1916 in the second issue of the magazine, BEAUTY FASHION, is a lead, feature article entitled, "The Market for Men's Toiletries." In this article are illustrated numerous brands and packages including every single thing now a part of the men's toiletries lines, plus a number of items which we have been forced to discontinue, such as mustache dye, mustache wax, etc.

These products were not new and they were sensational only in their packaging and in the fact that for the first time they provided a class, prestige group of products in a market that up until then had contained only the men's toiletries distributed in a mass market at a low price. This was the phenomenon which was interesting and gave ample reason for a moderate amount of excitement. It is remarkable that at this time everything else purchased by a man offered a selection of class, prestige products and low or medium priced, mass distributed products.

The discriminating man if he enjoyed a pipe, could purchase a Dunhill or Comoy. In cigars he had his choice of nickel and dime cigars, but if he were discriminating and had the money there were a number of fine Havanas sold in exclusive outlets at a much higher price. This was true, also, of his clothes and his hats, of his liquor and his fishing rods.

Courtley, Seaforth, Sportsmen and the other lines of men's toiletries which

The picture above is reproduced from the May 1916 issue of Beauty Fashion and shows a grouping of men's preparations on display at that time at John Wanamaker, New York.

PRECISION-MADE "fitments"

to your Specifications

SCIENTIFIC perfection is your assurance with every dropper no matter what your specifications are.

We have successfully helped many manufacturers design and execute complicated "fitments" for Serums, Vaccines, Toxins, Medicines, Chemicals and Vitamins and we can, without hesitation, work out your dropper problems.

Expert workmanship and the finest materials assured in every dropper. All fitments are completely assembled. Prompt delivery. Send samples and specifications for quotations.

A Dropper to fit Your Every Need!

totus PHARMACEUTICAL LABORATORIES

70 E. COULTER ST. PHILADELPHIA 44, PA.

The Cosmetic Trend

With so much recession psychology in the air, and talk about the needs of catering to the low and medium priced customers, manufacturers of high priced perfumes may easily be led to believe that this is not the time for them to push their goods and rather wait until "conditions improve." Actually there can be made out a much stronger case in favor of the reverse policy, because if ever there was a time when things should be booming in the high quality, specially-priced markets, it is now.

Upper income levels are as high and secure as ever and, what might be described as the luxury-margin of income, is unimpaired. Moreover, the borderland that lies between the top income strata and the upper medium income one is broader today than ever. There are more people who can afford spending a few extra dollars on a costly perfume as a gift than has been the case for years.

The danger in all this is that many manufacturers in the high-priced field, those that have carried on through the war and the numerous ones who now are trying to make a comeback, may let themselves be discouraged at a time when all their efforts should go in rebuilding their market.

It is rather difficult to supply a statistical basis for the urgency of making efforts in this direction. However, even a superficial market-study can show how much the war-years have changed the structure of the cosmetic quality retail-market.

The correct policy right now should be to let the market know that quality manufacturers are back again at their old stand and ready to supply any retail outlet that has the grit and the customers to make a go of at least one high priced line.

tumbled into the market in a rapid and exciting fashion did nothing more than to fill an existing, but unsuspected vacuum. For the first time they gave the man of discriminating taste a class, prestige product available in the finer retail establishments, and comparable with his Havana cigar, his Dunhill pipe, Brooks Brothers clothes and his hand-made fishing rod.

Also for the first time men's toiletries were packaged in a way that entitled them to a conspicuous place in the gift market, which has always provided a predominant part of cosmetic volume. We have estimated that instead of providing an entirely new market composed of new consumers, these men's toiletries in the class field secured a minimum of 75 per cent of their business from already existing users of men's toiletries irrespective of whether this was a direct purchase or a gift by a woman.

These figures are borne out by a very comprehensive survey made by one of the larger companies a few years ago. In one thousand interviews with purchasers of the particular brand, they discovered that 1/5 of these customers had not previously used a men's toiletry, but that 4/5 had been regular users for some years and had been purchasing regularly such brands as Williams, Mennen and Colgate.

Returned Goods

In a talk about returned goods, Representative Wright Patman, added another chapter in the interpretation of the Robinson-Patman Act which just about completes the confusion of businessmen, and the opinion that the act can never be enforced as it is written. Speaking to cloak, suit and skirt manufacturers, Mr. Patman pointed out that the act prohibits discrimination in any form in favor of one purchaser against another. Acceptance by manufacturers of unjustified cancellations and returned goods from retailers is therefore a violation, since one purchaser receives a special consideration compared with other accounts.

We suppose what Mr. Patman had in mind is that manufacturers can take back returned goods, but should do it on proportionally equal terms without regard to the general inventory condition of any one retailer or what the retailer might do to the manufacturer's prestige and good name if he were forced to dump this merchandise.

Returning goods, particularly following Christmas, has long been a practice that has caused a great many headaches in this industry. No manufacturer would defend this trade practice as good business. But the blunt facts are that in certain types of business, such as class, prestige cosmetics, fashion apparel and other products in selected distribution, where the prestige and reputation of the manufacturer has been built upon a careful basis of restraint and exclusiveness, the acceptance of returned goods is an essential part of the business. No manufacturer in this category can afford to let a retailer throw his products on the market in a forced sale.

Were this section of the Patman act to be rigidly enforced, manufacturers of this kind would be compelled to limit sales severely, and in this way would lose a great deal of business that they now receive from a retail inventory that involves the risk of returned goods. This interpretation of the act by Representative Patman draws the line more clearly than ever between the products in mass or dense distribution and the products in class, selected distribution. It may be that this act can work without too much injustice and disruption of business in products sold in mass distribution. But it becomes clearer every day that the Putnam act, if rigidly interpreted and applied to companies in selected distribution, would cause a complete disruption of their business.

The application of the act to cooperative advertising, demonstrators, various forms of retail promotions and now returned goods would prevent these manufacturers from working closely with leading retailers, and in this way providing a stimulus to business over a wide community area, and to the benefit of many secondary retailers who participate with profit in the expanding market which this type of promotion provides.

The Robinson-Patman Act lays down rigid rules for business without giving consideration to the unique character and differences in many ways of doing business. This is a serious weakness of the act. It is the reason why it is so largely disregarded in several different industries. In its present form, it will continue to be disregarded because to enforce it blindly would mean that a large part of the fashion, class industry would become completely disorganized and disrupted.

Cutthroat Competition

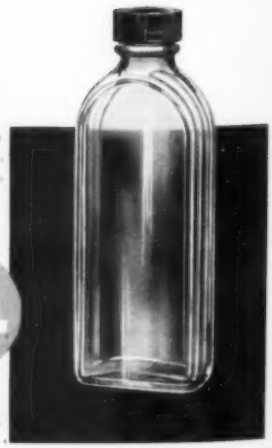
Among the flotsam and jetsam of the current hurricane in the cosmetic business, some unpleasant things are coming to light. A few cosmetic salesmen are taking advantage of a recent court decision, and are urging small retailers to sue a certain manufacturer for triple damages. The only thing that can be said about this is that in no other

Love at first sight

Much easier to sell, are drugs, cosmetics and other products packed in eye-catching glassware such as Foster-Forbes Marion Ovals.

FOSTER • FORBES

marion ovals



FOSTER-FORBES GLASS COMPANY • MARION, INDIANA, U.S.A.

Sales Representatives— ST. LOUIS • NEW YORK • CINCINNATI • DETROIT • CHICAGO • CLEVELAND
ST. PAUL • MILWAUKEE • ATLANTA • KANSAS CITY • MEMPHIS • LOUISVILLE • HAVANA, CUBA

branch of the animal, bird or reptile kingdom is there a living thing that fouls its own nest.

The head of a large manufacturing company recently sent out a pamphlet to retailers advising them how to run their business. The primary suggestion was that the retailer should take the leading line in each competitive class and close out all of the others. The somewhat sad thing about this pamphlet is that 12 years ago this same individual started out with practically no money, practically unknown to the trade, and in a highly competitive field, made a conspicuous success. If retailers had operated on his suggestion, he would not be in business today and a number of the future constructive leaders of the industry would have no chance to get started.

Even aside from this there are a number of reasons why an intelligent retailer would discard this advice without giving it a second thought. In the cosmetic industry at least, a monopolistic position has always done something mentally to the manufacturer. Why this industry tends to breed Napoleonic complexes, which for one thing resolves into very bad tactics with the retailer, has never been figured out.

In the second place any retail department which does not give proper choice and selection in every branch of the industry soon loses its traffic and the interest of the consumer. While a store may keep a heavy inventory in the leader with a large turnover, a buyer knows it is an essential part of his department to keep a variety of lines that may not compare in volume or profit with the leader.

This industry is a dynamic one. The small company of today may hit a package idea or a promotion idea or some other kind of idea that will make it a rising popular seller tomorrow. This happens continually with perfumes and cosmetics, and is one of the big reasons why the industry is so fascinating.

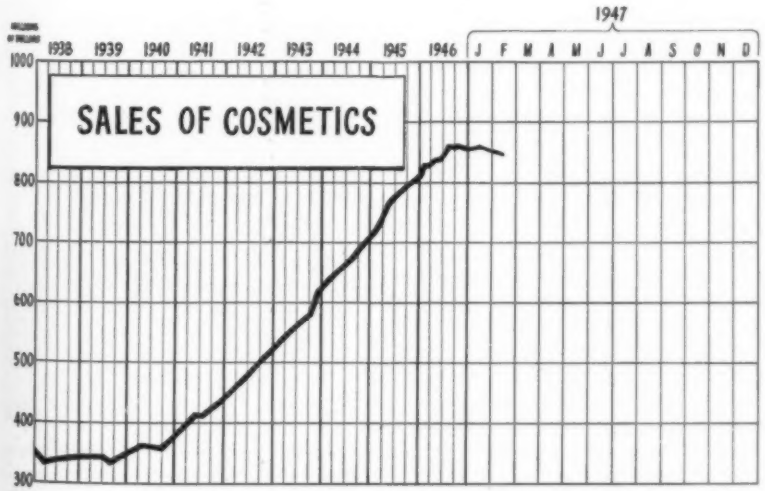
No retailer can afford to cut himself off from a small line which is doing a good business, simply because it is small. If a company shows real competence in merchandising and has a good product and package, it must always be thought of as a potential for doing a big job, profitwise, for the store at a future time.

The whole history of cosmetics show that practically every year, one or two or three of these hits the trade.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing the increase for the month of February 1947 compared with the same period in 1946.

	Department Store	*Drug Store*		*Department Store*	*Drug Store*
Atlanta	–1	+18	Memphis	–3	+2
Baltimore	–1	+1	Milwaukee	+4	+10
Birmingham	–1	+7	Minneapolis	+5	+9
Boston	+12	+5	Newark	0	+10
Buffalo	0	+7	New Orleans	–3	+6
Chicago	+3	+10	New York	+8	+7
Cincinnati	+7	+3	Philadelphia	+10	+4
Cleveland	+7	+7	Portland	+19	+1
Dallas	–1	+2	Providence	+4	+1
Denver	+11	+12	Saint Louis	+4	+9
Detroit	+3	+12	Salt Lake City	–2	+1
Indianapolis	+2	+4	San Francisco	+5	+12
Los Angeles	+9	+2	Seattle	+3	–1



Retail sales of cosmetics for the twelve months ended with February 1947 amounted to $849,514,000. This compares with a total of $855,802,000 for the twelve months ended with January 1947 and with $829,454,000 for the twelve months ended with February 1946.

Name Wanted

The new Rexall drug store in Los Angeles is supposed to be the biggest drug store in the world. One hundred thousand dollars will be spent in newspaper, radio and outdoor advertising to feature the opening of this huge store. Any drug store that can spend one hundred thousand dollars in publicity certainly is not figuring on prescriptions, packaged medicines or cosmetics to pay dividends on this advertising investment. We wonder what the new departments will be and whether they will keep on calling it a drug store.

Retail Drug Survey

In a second report of a continuing study, sponsored jointly by the National Association of Retail Druggists and the Saturday Evening Post, a number of important facts concerning the operations and merchandising practices employed by a large number of retail druggists are revealed.

Price appeal has for a long time been recognized as a means of inducing patrons of one store to patronize another. The recognition of this fact has been so widespread that many operators have failed to take into proper account such other factors as more complete assortments of brands and shades;

Alexandra de Markoff offers Hand and Elbow Cream, a delightfnl cream for hands and arms, and Virgin Flower Hand Beauty, a protective product for the hands.

quality merchandise; fresh stock; pleasant clean surroundings; professional atmosphere; better manufacturing skill; special services and others which some purchasers evaluate more than price.

When prices are equal, these other factors account for many purchases made at one location rather than another. By emphasizing these other factors, many drug store merchandisers have capitalized on consumers' desires to such an extent that some of the products in the more profitable departments of the drug store have been turned into specialty goods.

In many instances convenience of location, relatively low unit value of the product, and lower prices are often ignored by the patron when making purchases. This trend is particularly noticeable in the prescription department, toilet goods, baby goods and soda fountain.

The consumers' evaluation of these other than price factors is one of the reasons for the growth of a family of products when a particular department is featured in a store. Some store owners induce customers into their stores by featuring items with a specialized appeal and capitalize on that patronage by merchandising usual commodities not so highly evaluated by the consumer so as to obtain additional sales of these products. The principles of display, impulse purchase and related selling are fully exploited.

While the volume of sales in the usual drug store varies from one day to another, Sunday is the slowest day of the week for most stores while Saturday is the highest volume day of the week followed by Friday then Monday. Of course individual stores have experiences which do not always follow this pattern. For example the volume done on Sunday in some stores is almost negligible in the main business areas of a large city, while frequently a neighborhood store or one at a good traffic center may find Sunday one of its best days. Relative importance of each day of the week as shown in the survey were as follows: Saturday, Friday, Monday, Tuesday, Thursday, Wednesday and Sunday.

In regard to store advertising, most drug stores find it profitable constantly to advertise their merchandise and services to attract consumer attention. Nearly seventy-five per cent of all stores advertise but the percentage of stores varies from a low of 35 per cent for the lowest volume group to a high of 85 per cent for those in the highest sales bracket. Not only is the greatest portion of advertising done by the stores of high volume but these stores have more regular schedules and frequently use several types of media.

Among all the stores advertising, newspapers of general circulation are used more than any other type. These drug stores find the local paper which frequently has a small circulation, a good medium for reaching their best local patrons and prospects at a reasonable cost. More than 71 per cent of all stores report the use of newspapers of general circulation. In the larger cities general newspapers are not used as widely, but the neighborhood paper and shopping news assumes importance. Neighborhood papers are used by 23 per cent of all these stores.

Pond's Dreamflower Talc has won the Certificate of Award for the greatest merchandising value gained from packaging design for 1946, given by the Syndicate Store Merchandiser.

Wrisley has added bath crystals in a sparkling glass tassel bottle with polished brass closure and cord and tassel trim, to its line of Gold Tassel bath toiletries.

Statute of Limitations?

Speaking of returned goods, one of the large cosmetic companies decisively handled one of the worst features of this year's deluge. A new buyer in one of the prominent department stores, in removing the dust and debris in the stockroom, discovered a number of packages which the store had carried for three years. The buyer promptly notified the manufacturers that they were returning this merchandise. But one manufacturer refused to accept it on the very sensible basis that the three-year-old merchandise was entirely due to lack of a system and good business management on the part of the store, and that the loss from capital and interest in this ancient mer-

Summer Frost is a new summer cologne by Prince Matchabelli. The cologne is lime-colored and comes in a specially frosted version of the Prince Matchabelli crown-emblazoned flask bottle.

Change-proof....

★ Chemically inert
★ Full product protection
★ Easy to label
★ Easy to fill
★ Light-weight yet strong
★ Speed up production

Anchorglass standard containers protect products indefinitely

THERE'S one way to make sure that the products you manufacture retain all the strength and purity that you put into them. That way is to pack them in Anchorglass standard containers.

Chemically inert, Anchorglass containers, like the ointment jar shown here, are proof against change—change in strength, purity and other qualities peculiar to your products. They deliver your products to the consumer the way you want them delivered—just as they were when they left your plant.

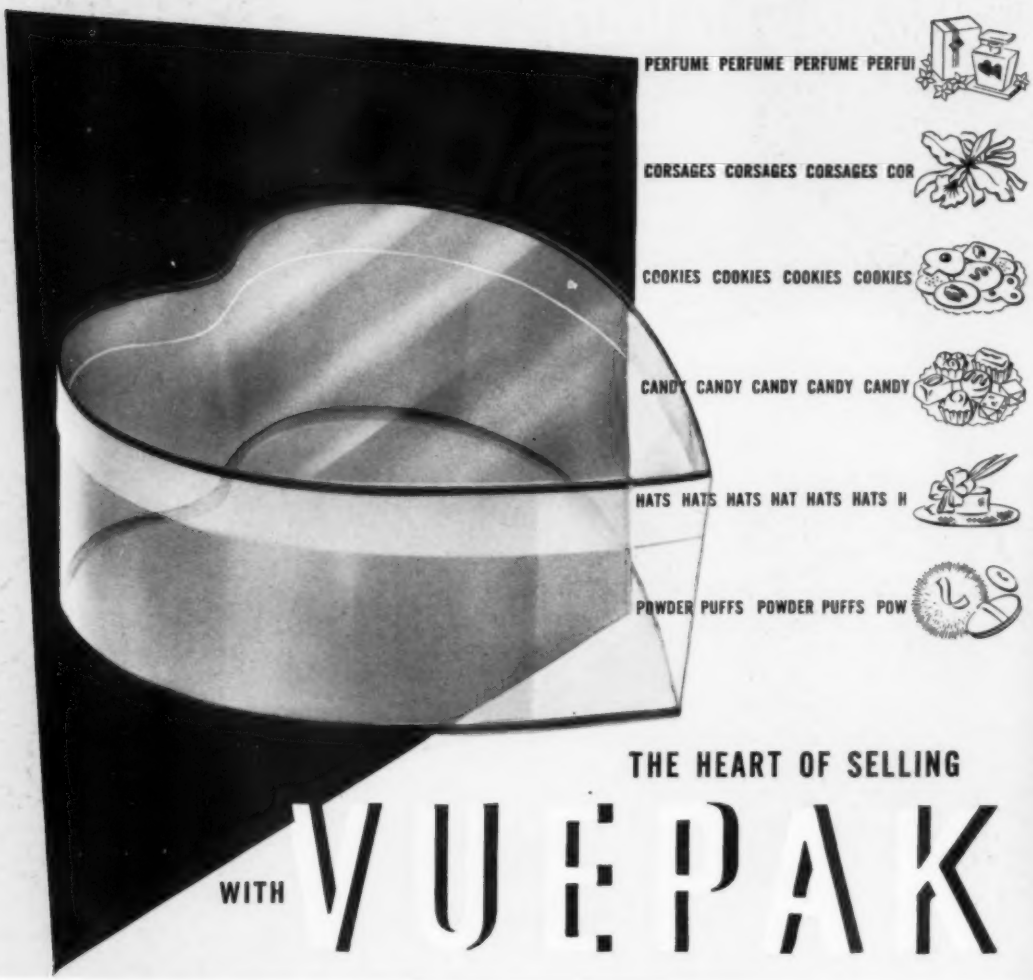
All Anchorglass standard containers offer definite production advantages, too. Because they're so easy to fill, label, seal and pack, they speed production — reduce packaging costs, save you money. They're light-weight but strong.

Your Anchor Hocking representative will be glad to tell you more about the many advantages of Anchorglass standard drug and chemical containers. Just call him, or write Anchor Hocking Glass Corporation, Lancaster, Ohio.

Tune in "Crime Photographer" every Thursday evening, entire Coast-to-Coast Network, CBS.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO


PERFUME PERFUME PERFUME PERFUI
CORSAGES CORSAGES CORSAGES COR
COOKIES COOKIES COOKIES COOKIES
CANDY CANDY CANDY CANDY CANDY
HATS HATS HATS HAT HATS HATS H
POWDER PUFFS POWDER PUFFS POW

THE HEART OF SELLING

WITH VUEPAK

No matter what your product, its eye-appeal is instantly translated to "buy-appeal" with sparkling, transparent Vuepak. Color, beauty and design are enhanced, fully displayed and protected in individual "showcases" of this rigid, Monsanto packaging material. In addition, containers of Vuepak carry a sales plus in attractive re-use possibilities for buyers. Retailers, too, are eager to capitalize on Vuepak'd products because they move faster, display better, build prestige, and protect against loss through shopwear. New fabricating methods make Vuepak economically available in the widest possible variety of shapes. Get full details from your box supplier, or: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts. In Canada, Monsanto (Canada) Ltd., Montreal.

Vuepak: Reg. U. S. Pat. Off.

SERVING INDUSTRY . . . WHICH SERVES MANKIND

MONSANTO CHEMICALS — PLASTICS

VUEPAK

New DuBarry make-up ensemble, "Double Treasure"—a golden metal lipstick case with lucite base and a complimentary 7/8 ounce box of DuBarry face powder.

Barbara Gould offers Skin Sachet in a modern bottle with gold foil label, plastic cap bowed with flame red ribbon in a floral blend summer fragrance.

Ar-Ex Cosmetics, Inc. offers a line of cosmetics in two forms—scented and unscented—in consideration of the normal skin and the hyper-sensitive skin.

chandise was the store's own responsibility. The buyer then promptly announced that the store would put the merchandise, with the name of the well-known manufacturer, on sale at 10 cents on the dollar. The manufacturer promptly notified the store to return the merchandise, and then cut the store off his list.

There may be some reasons for the return of Christmas or current merchandise because it may be said that there is some mutual responsibility between the buyer and the seller in price maintained merchandise, to see that the inventory of the store is kept within reasonable limits. But suddenly to discover three-year-old merchandise, which the store did not know was lost somewhere in the stockroom, and which the manufacturer could not possibly know existed, is such unforgivably bad retailing that it certainly will not help the reputation of the retailer as this story gets around.

Changes in Distribution

This is a period of radical changes in distribution. The drastic reduction of inventory by retail stores is forcing many manufacturers back to a distribution considerably smaller and more scattered than was the case last year.

With failing business and often with reduced advertising expenditures, there is a great temptation for manufacturers to try to maintain volume by opening additional retail outlets. These new outlets sought by manufacturers are often the retailers of smaller towns or secondary retailers of the cities. Often it means that the manufacturer, thinking only in terms of his volume, is forcing his distribution into a lower average level of quality.

Few companies have the courage of one manufacturer in this industry, who decided that part of his trouble lay in the fact that he had extended distribution too far ahead with too great a dilution of his expected consumer sales to make his product of substantial interest to worthwhile stores. The distribution of his product had reached a little over 3500 stores. Now with somewhat reduced advertising and a slight reduction in the sales force, this manufacturer is cutting his distribution to 2500 stores. If the volume of this manufacturer, as he anticipates, runs at about 90 per cent of 1946, this volume divided among a smaller number of stores gives him ample reason for demanding a better cooperative attitude from the retailer.

Solon Palmer has redesigned the packaging for its Brocade perfume in celebration of Solon Palmer's 100th year of creating perfumes.

Peggy Sage has designed a whimsical little wardrobe called the Color Collection, that holds two rows of six special size bottles of manicure polish colors.

Phillips' presents two new creams, Phillips' cleansing cream and Phillips' Skin Cream, both in jars streamlined for glamor with attractive pastel labels.

Correct . . . . . RIGHT TO THE FINGERTIPS

when the Container is by CARR-LOWREY

Carr-Lowrey's familiarity with the glass packaging problems of cosmetic manufacturers is the result of over 58 years of experience gained in working closely with the industry. The superior craftsmanship developed through this experience qualifies us to execute unusual designs with an exceptional degree of fidelity . . . to work with manufacturers in producing the most beautiful containers possible within a commercial price range.

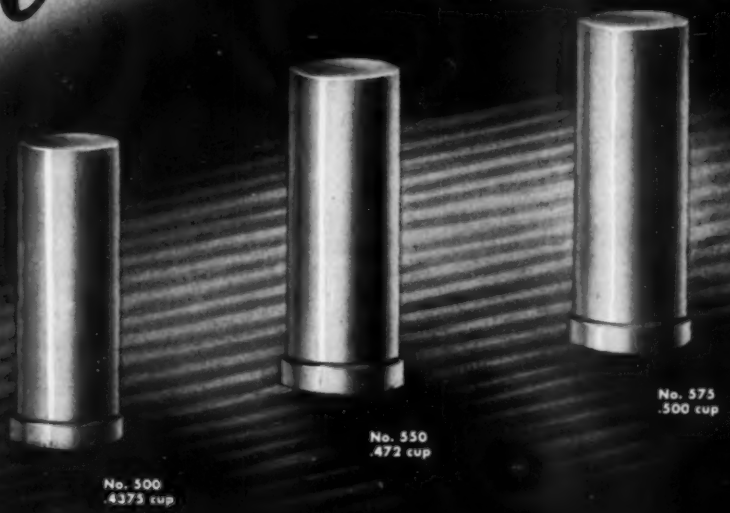
CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 500 FIFTH AVENUE (18) • *Chicago Office:* 1502 MERCHANDISE MART (54)

OPAL JARS • HANDMADE GLASS BOTTLES • MACHINE MADE FLINT GLASS BOTTLES

Rich Low BRASS

SWIVEL LIPSTICK CONTAINERS



"Fashioned Like Jewels"

THE ULTIMATE IN QUALITY

- De Luxe polished Rich Low brass — baked lacquer finish
- Free wheeling mechanism — It is impossible for the filler to swivel up while the cap is on
- "Click-Tite" closure*

PHONE, WIRE OR WRITE FOR SAMPLES

BRODER INDUSTRIES

INCORPORATED

167 WEST 64th STREET, NEW YORK 23, N. Y. • TRafalgar 7-0092

*Patents Pending

THE UNFAILING DEPENDABILITY OF

New Perfection DROPPING PARTS

(1)

Saftee Ball glass—for eye drops.

(2)

U. S. P. glass—for high potency internal medicines in uniform drops.

ASSURES SATISFACTION to the LAST DROP

A large amount of research and careful experimentation has gone into your product. However, despite the high quality of your preparation, its fullest potentialities can only be reached when the use is easy, convenient and dependable.

The selection of New Perfection dropping parts to accompany your product into the customer's home will relieve you of all concern on this score. The uniform high quality of these dropping parts gives you complete assurance of perfect functioning any time they are called into use. Your product and label, plus New Perfection dropping parts, provide for a long succession of great sales.

New Perfection dropping parts are available in a wide range of styles and sizes to fit your own bottle or in combination with our New Modernistic bottle in Amber, Blue, Green or Clear glass. Sizes:—2 cc, ⅛, ¼, ½, 1 and 2 ounce.

Bulbs in many styles, sizes and colors. If your product is of an oily nature, you will be wise to specify Amekine synthetic rubber bulbs. Amekine does not swell like natural or other synthetic compounds after it has been in contact with oil preparations over a long period.

Caps of plastic or metal in various sizes and styles.

DROPPER GLASSES CAN BE SUPPLIED PLAIN OR CALIBRATED AND LETTERED IN COLOR TO MARK DOSAGES.

(3)

Semi-blunt glass—for large drops for general use.

(4)

Blunt glass—extra strong for insertion in the nose or ear.

(5)

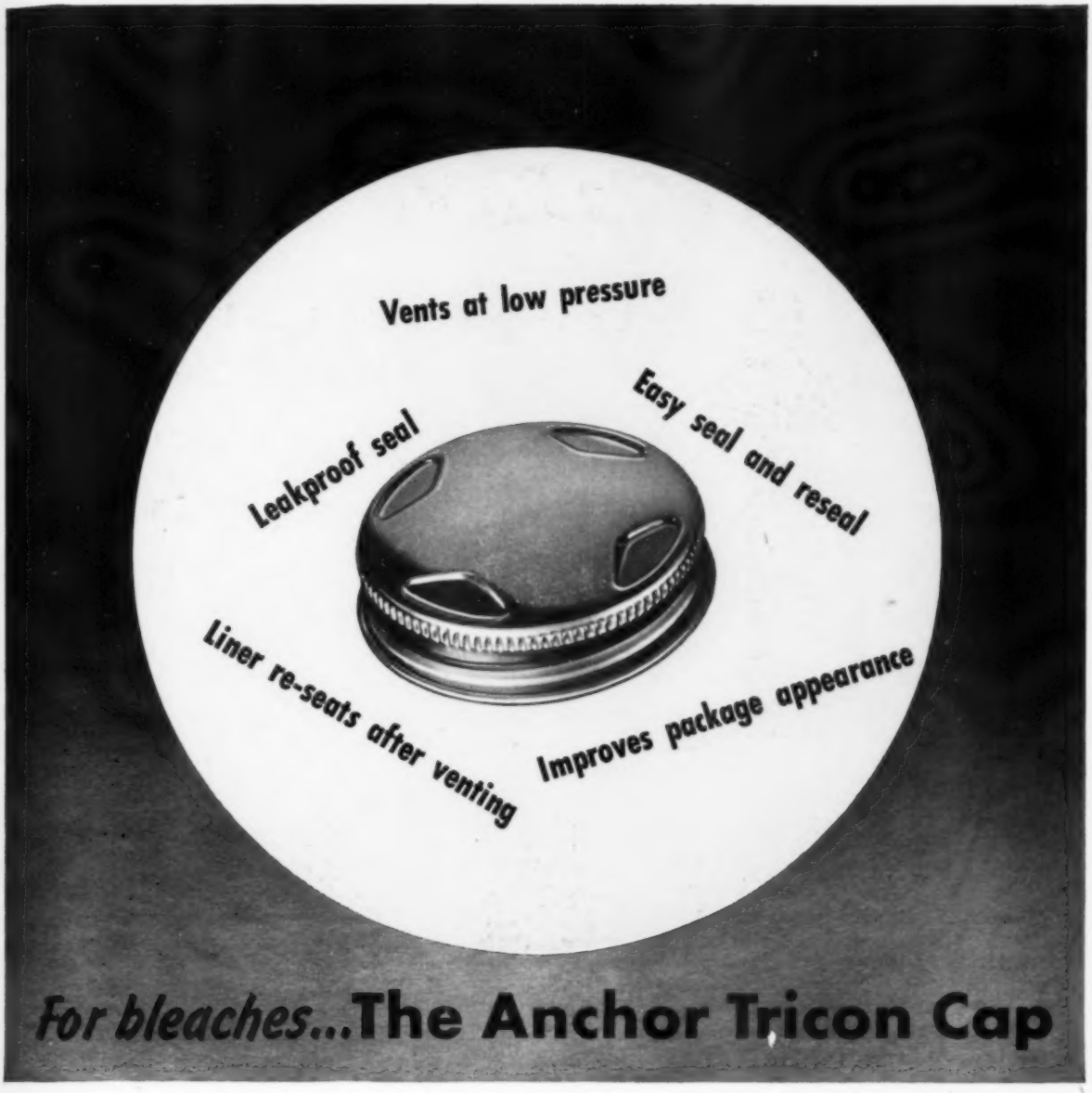
Regular straight glass—for small size sample packages.

Let us have your specifications and we will be pleased to send you samples and quotations.

PENNSYLVANIA GLASS PRODUCTS CO. INC.

428-432 NORTH CRAIG STREET • • • • • • • • PITTSBURGH 13, PENNSYLVANIA, U. S. A.

"GLASS GOODS OF THE BETTER KIND"



*For bleaches...*The Anchor Tricon Cap

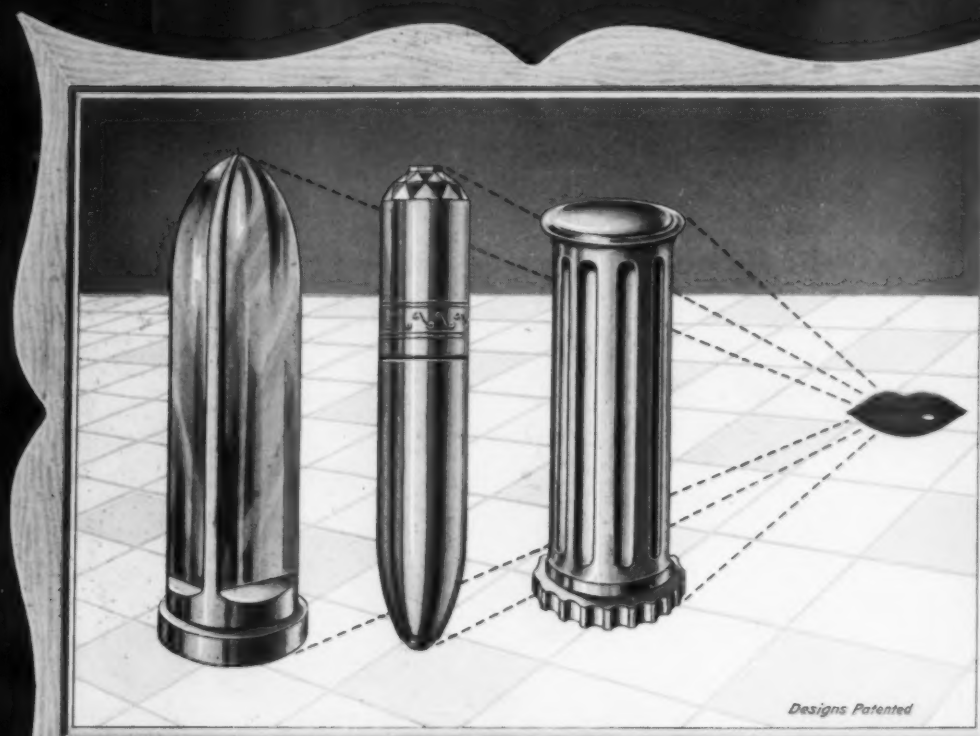
THE Anchor Tricon Cap is a low-pressure venting closure designed especially for sealing gas-forming products. When pressure builds up, the liner gives sufficiently to allow gas to escape—then reseals immediately, and tightly.

Further, the full-domed Tricon has all the added advantages of the Anchor C. T. Cap — broadly rounded thread that prevents wedging or jamming, deep knurls for easy application and removal, good looks that add consumer appeal. And withal, it provides an effective airtight and leakproof seal.

Tune in "Crime Photographer" every Thursday evening, entire Coast-to-Coast Network, CBS.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO



WE regret to announce that, due to our present volume of business, we are unable to accept new orders for delivery this year. We can, however, take orders for delivery in 1948.

Meanwhile our designing department is always available for consultation on new products. We welcome the opportunity to prepare designs to your specifications and to submit new Weston designs for your approval.

Lipstick Container Division

WESTON INTERNATIONAL CORPORATION

85 East 10th Street . . New York 3, N. Y.

When we say Continental cans serve *behind* the labels of America's finest products, we are not overlooking the labels, themselves. Those labels we *lithograph*, that is!

No doubt about it, Continental labels serve, too! They make packages attractive—easier to sell. A smart design, faithfully reproduced by modern lithography, stands out as effective point-of-sale advertising for the product.

Our customers seem to appreciate this important "plus," because, every day, they're looking more and more to the Triple-C trademark for the "best in quality, best in service."

Continental Can Company

100 East 42nd Street, New York 17, N. Y.

ARE YOU Proud OF YOUR Product?

A Quality Product deserves a quality bottle—and that's the kind that SWINDELL produces.

"Quality" is no empty word. It means "beauty of design" that lends glamour to your product—

It means "sturdiness and durability" that protects you against undue shipping loss—

It means "uniformity"—

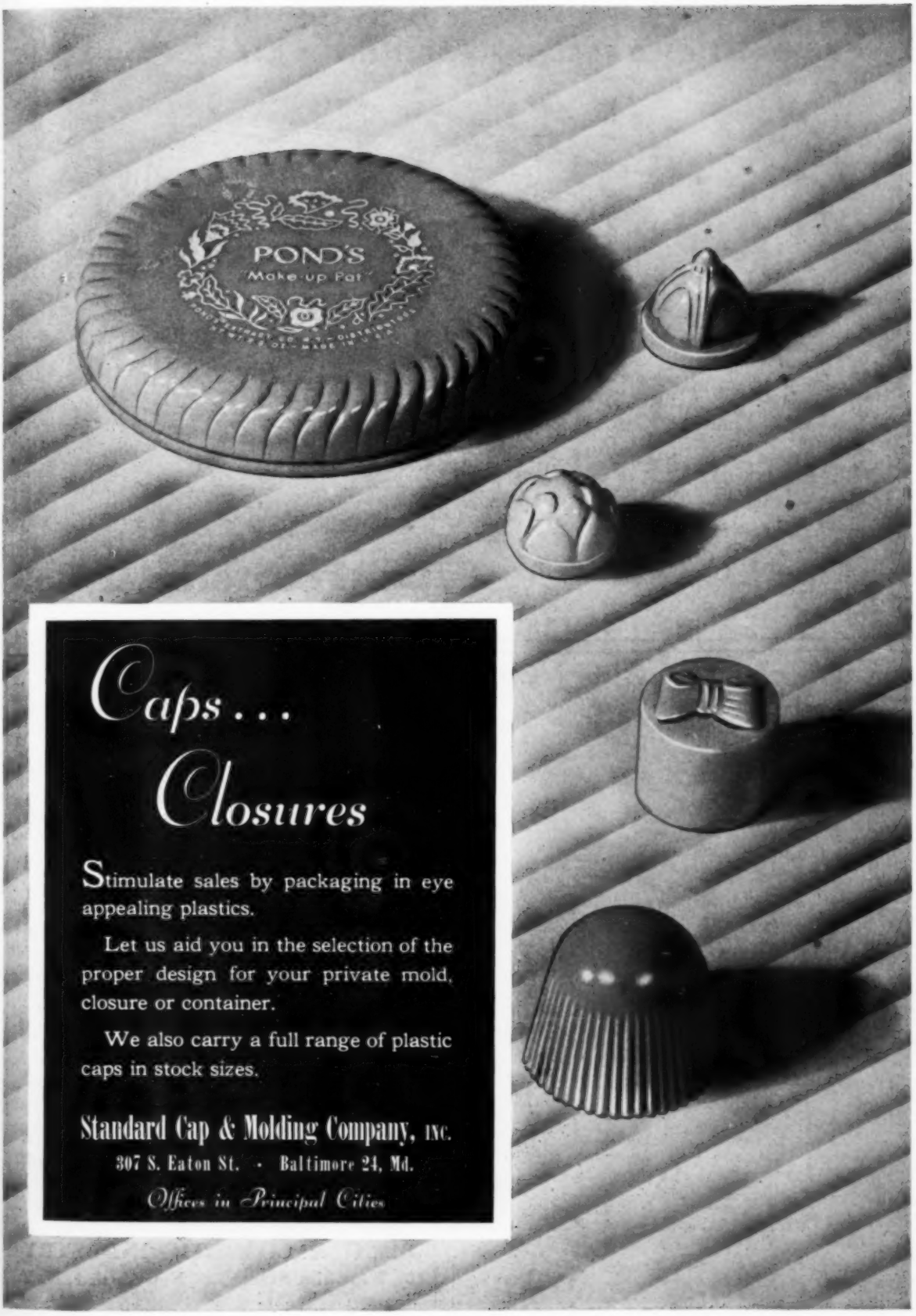
It means "dependability".

Whether you need a stock or a private mould bottle, machine or hand-made, SWINDELL standards of quality add lustre to your product.

At your service!

SWINDELL BROTHERS, Inc.

200 FIFTH AVE., NEW YORK ★ BALTIMORE 30, MARYLAND ★ ROBERTO ORTIZ • HAVANA, CUBA



Caps . . . Closures

Stimulate sales by packaging in eye appealing plastics.

Let us aid you in the selection of the proper design for your private mold, closure or container.

We also carry a full range of plastic caps in stock sizes.

Standard Cap & Molding Company, INC.

307 S. Eaton St. · Baltimore 24, Md.

Offices in Principal Cities

PORTRAIT OF A SALESMAN MAKING A SALE!

P.F. DECALS

The best time to make a sale, is when the customer is in a buying mood ... Colorful **PALM FECHTELER DECALS** dress up your packaged goods, and give it the appeal that leads the customer to choose your product over the products of your competitors... Result—another sale.

FREE OFFER
Send us a copy of the label you are now using, a comprehensive, or a rough sketch ... at no obligation to you, we will submit sketches and samples to show you how PALM FECHTELER DECALS can add to the beauty of your Product.

Palm, Fechteler & Co.
220 WEST 42nd STREET, NEW YORK 18, N. Y.
21 EAST VAN BUREN STREET, CHICAGO 5, ILL. Dept. DC-1

another
"SHOPPER STOPPER"
by Braun

BALM BARR, the "creme-whipped" hand lotion, required a "bottle-jar"—graceful as a bottle, functional as a jar. Result: a beautifully squat bottle that's instant identification for Balm Barr the country over. BRAUN packaging can help you, too.

W. BRAUN CO.
304 N. CANAL ST. • CHICAGO 6, ILL.
347 FIFTH AVE. • NEW YORK 16, N. Y.

DRUG & COSMETIC REVIEW
1946-47 Edition

Cloth bound, 450 pages

1. 36 articles on formulation and manufacturing.
2. Over 500 formulas.
3. 186 supply manufacturers' catalogs, covering recognized suppliers of packages, equipment, chemicals, raw materials and perfume materials.
4. Comprehensive directory of all supplies for this industry.
5. Current prices 1934-44.
6. Associations.

The most comprehensive reference book of the industry. Now available. Immediate shipment. $3.00 in U. S. $4.00 foreign.

Book Department
DRUG & COSMETIC INDUSTRY
101 West 31st Street New York 1, N. Y.

FINDING A LOST FREIGHT CAR SOLVED THIS GLASS PACKER'S PROBLEM

NOT so long ago, a customer asked our help in tracing a long overdue carload shipment of glass containers. His situation was desperate. If he couldn't locate and get delivery on the containers within a few days, he'd have to shut down his packing lines.

Our traffic department traced the car successfully from its point of origin, Millville, N. J., through several points where the car is shifted from one train to another, to Albany, N. Y. Here they struck a snag.

The local freight agent at Albany insisted the car had been forwarded on a specific train. And he had papers to prove it. But the car hadn't been on the train when it arrived at its destination!

Having no luck with the local agent, our traffic department obtained the cooperation of the railroad's New York office. They finally discovered the car resting on a remote siding about halfway between Albany and the ultimate destination! It had developed a serious running gear defect en route, been cut out of the train—and the conductor had forgotten to report it!

Repairing the car would have delayed too long the delivery to our customer. Our traffic department persuaded the railroad to transfer the shipment to another car, stop a through train to pick it up. Delivery was made just in time to keep our customer's lines rolling.

Happily, situations like this don't arise very often. No matter what problems may come up in handling your order—legal, scientific, engineering, or design, you can always be sure of getting the best professional assistance from Armstrong's unusually large and well-staffed service departments.

For full information on any of Armstrong's glass or closures, call your Armstrong representative. Or write direct to Armstrong Cork Co., Glass and Closure Division, 3805 Prince St., Lancaster, Pa.

IS YOUR PROBLEM SIMILAR?

● Knox Glass Associates' twelve plants, strategically spotted throughout the United States, and Knox's designing and fabricating know-how can solve your bottling problem as easily as they have solved these varied puzzles. Our correspondence files are filled with such!

EVERY KNOX *Container* A BOOST FOR YOUR PRODUCT

so you can see why we want a bottle specially designed to our needs, not just an ordinary size or shape.

Yours very truly,

Gentlemen:

We wish to purchase a new bottle for our product. It has to be as light as practicable, as shipping costs must be kept down.

Do you have a factory anywhere near to our plant? We should prefer to buy from a local plant to avoid transportation problems and so that we may discuss first hand questions of design and the like.

Because the natural color is a distinctive feature of our product, we want the product color to show through the label. Is this practical?

Gentlemen:

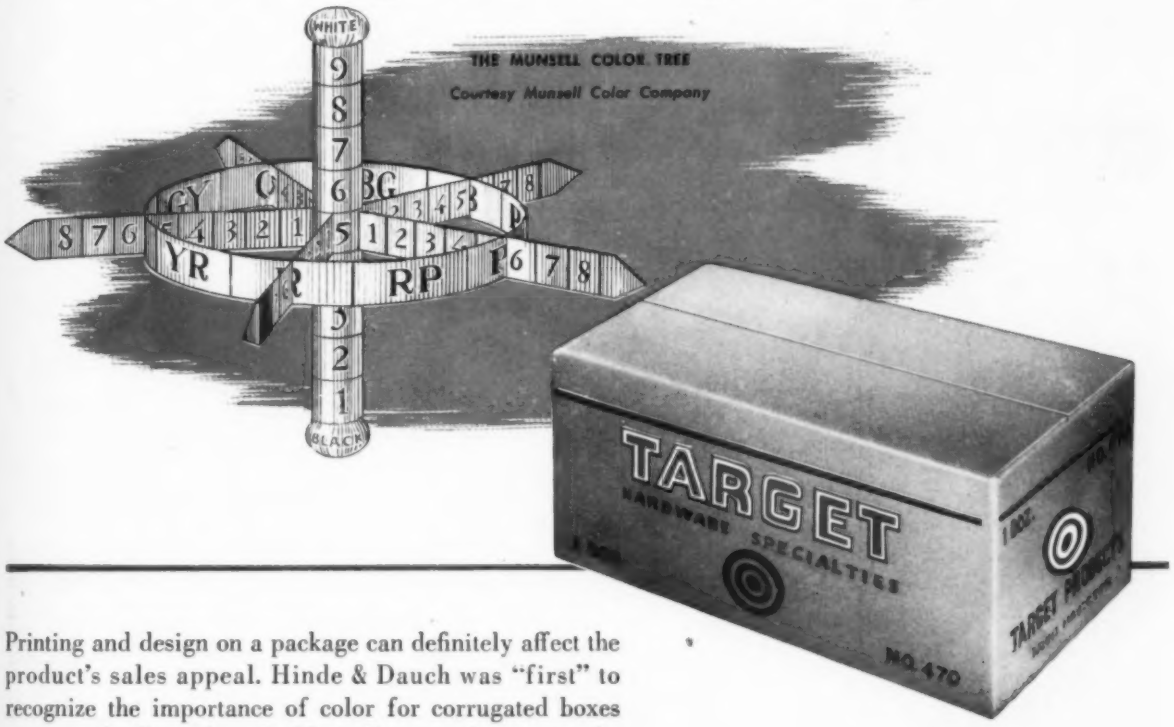
Since our product is shipped directly from our plant to receiving stations all over the country, we need above all a bottle that will stand long freight shipments and rough handling.

We are well aware of the additional sales appeal bottled products and if the transportation problem [illegible] we should like to adopt this metho

KNOX GLASS ASSOCIATES, INC., Knox, Pa.

Knox Group operating twelve modern plants strategically spotted throughout the United States

first to apply a standard, scientific COLOR system to corrugated box printing



Printing and design on a package can definitely affect the product's sales appeal. Hinde & Dauch was "first" to recognize the importance of color for corrugated boxes ... was "first" to adopt the Munsell system for accurately selecting, naming and classifying color. For years, H & D customers have had complete assurance that there would be little or no variance in colors—between one box order and another. On the long list of H & D "firsts" are also PREPAK*, the unit package; DUPLEX, the shipping-display box; and the duo-use LUGGAGE BOX. These "firsts" increase sales potentials, by reducing loss from damage in transit, by cutting packaging and distribution costs. The Hinde & Dauch Paper Company, 4706 Decatur Street, Sandusky, Ohio.

LOOK TO

REG. U. S. PAT. OFF.

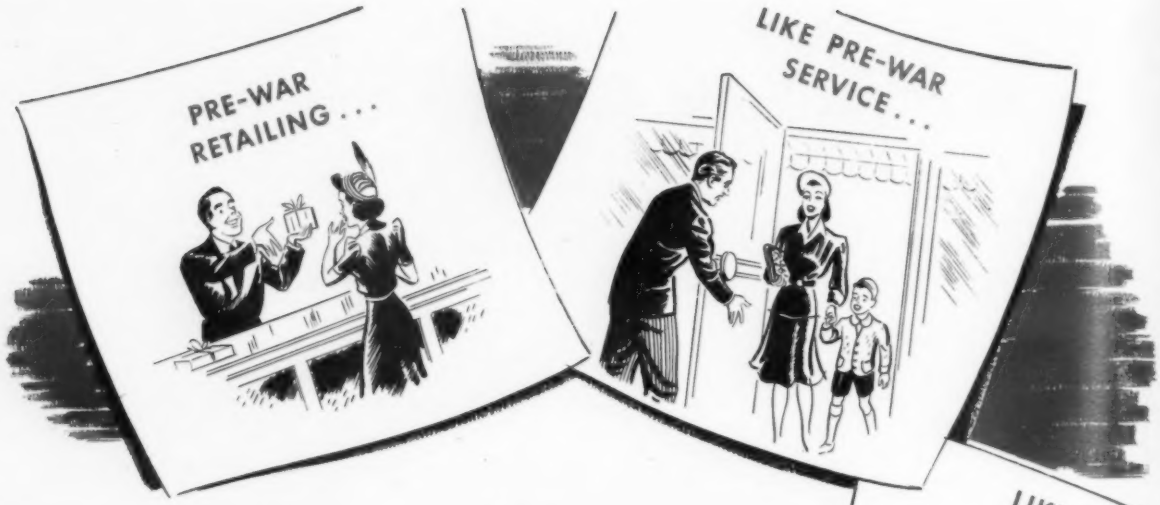
H&D

FOR PACKAGING "firsts"

*TRADE MARK REG. U. S. PAT. OFF.

HINDE & DAUCH · *Authority on Packaging*

FACTORIES IN: Baltimore 13, Maryland • Buffalo 6, N. Y. • Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Michigan • Gloucester, N. J. • Hoboken, N. J. Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec • Richmond 12, Virginia • St. Louis 15, Missouri • Sandusky, Ohio • Toronto, Ontario • Boston, Mass.



Retailing Your Product...1947

TODAY—*try* to get a retail clerk to SELL you something. Try to imagine him actually SELLING your product!

Today—not only is self-service on the increase in groceries, supermarkets and drug stores—but the spirit of "let the customer serve himself" permeates *all* retailing. The idea seems to be, "Let the *customer* decide what he wants and ask for it."

And that is precisely what customers are doing—*not before they enter but while they are in the retail stores!*

Women buy ¾ of all goods sold at retail. And surveys show they (62% to 75% of the 65 million adult American women) make up their minds *what brands to buy* at the point-of-sale —*after* they have entered the stores.

This means that *selling your product at retail* in 1947—is largely up to your *package!*

WAY TO INCREASED SALES

Let Ritchie help you develop a package that meets the increasing challenge of self-service retailing. A practical, production-planned package that instantly identifies, fully protects and conveniently dispenses your product. Easy to fill or pack—to handle, to stack or display— but above all an attractive, SELLING package.

Never the Power

W. C. Ritchie and COMPANY
8872 Baltimore Avenue • Chicago 17
★ SET-UP PAPER BOXES
★ FIBRE CANS
★ TRANSPARENT PACKAGES

Underestimate of the Package!

NEW YORK • DETROIT • LOS ANGELES • ST. LOUIS • MINNEAPOLIS • MILWAUKEE • PITTSBURGH
PORTLAND • SEATTLE • MIAMI

Plaskon Closures are stoppers in more ways than one!

THERE are three major features which distinguish Plaskon Molded Color for closures: utility, economy, and attractiveness.

Plaskon molding materials are plastics that are especially resistant to the chemical and physical action of a wide variety of products that must be packaged. Plaskon is completely impervious to the effects of alcohol, acetone, or other common organic solvents. It is not affected by oils, fats or greases. Because it is odorless, tasteless and inert, it has no effect upon any products with which it comes into contact.

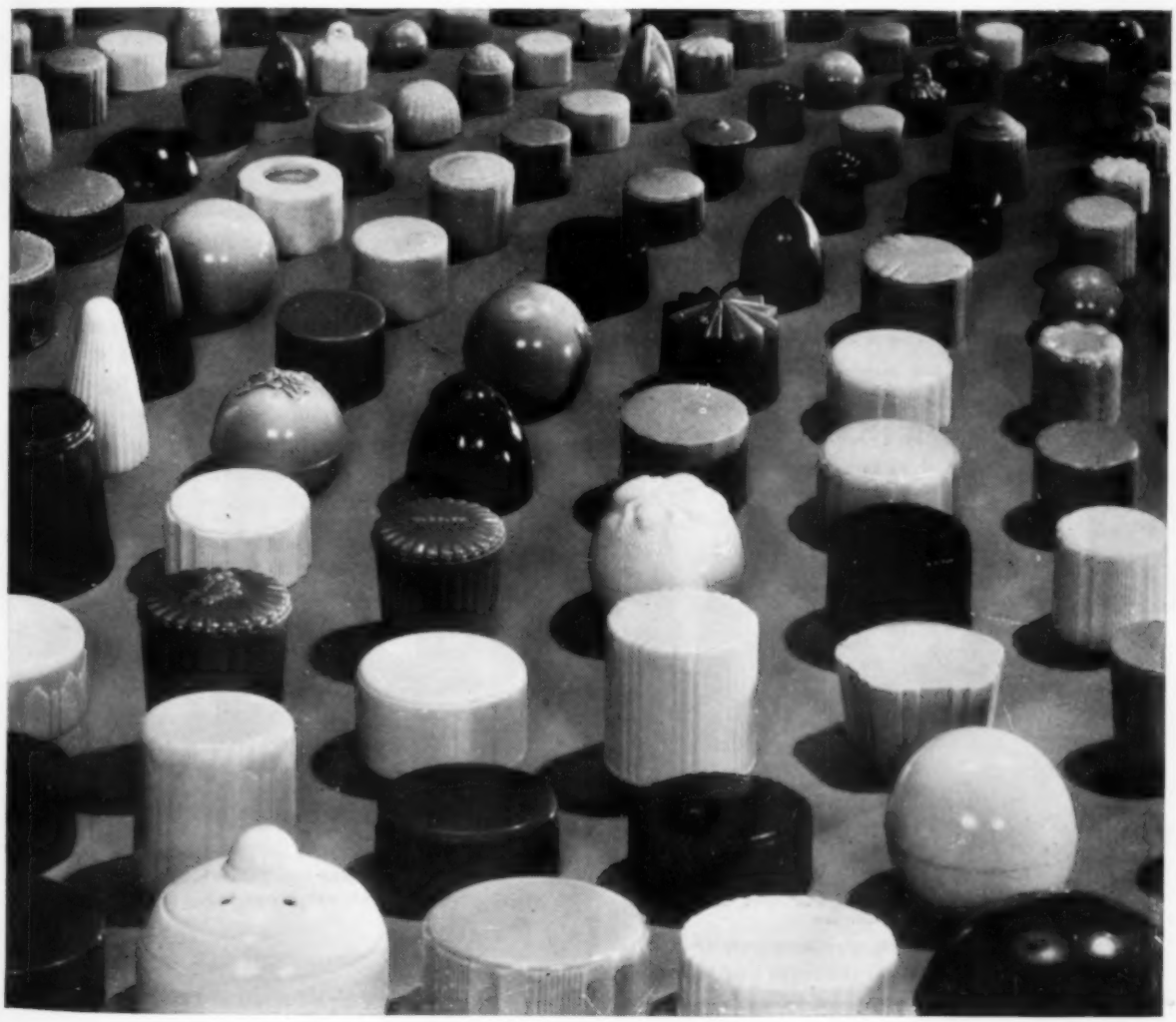
Plaskon plastics can be molded in large quantities at very economical prices. Distinctive designs and shapes can be secured to give new individuality to packages.

Plaskon molding materials are available in a wide range of beautiful, permanent colors that improve the appearance of any container, catch the eye and help make sales. We can give you helpful assistance in suggesting designs, qualified Plaskon molders, and technical advice so that you can efficiently adapt Plaskon® Molded Color to your manufacturing and sales programs.

®Reg. U. S. Pat. Off.

PLASKON
TRADE MARK REGISTERED
MOLDED COLOR

PLASKON DIVISION, LIBBEY-OWENS-FORD GLASS CO., 2110 Sylvan Ave., Toledo 6, Ohio • *Canadian Agent:* Canadian Industries, Ltd., Montreal, P.Q.



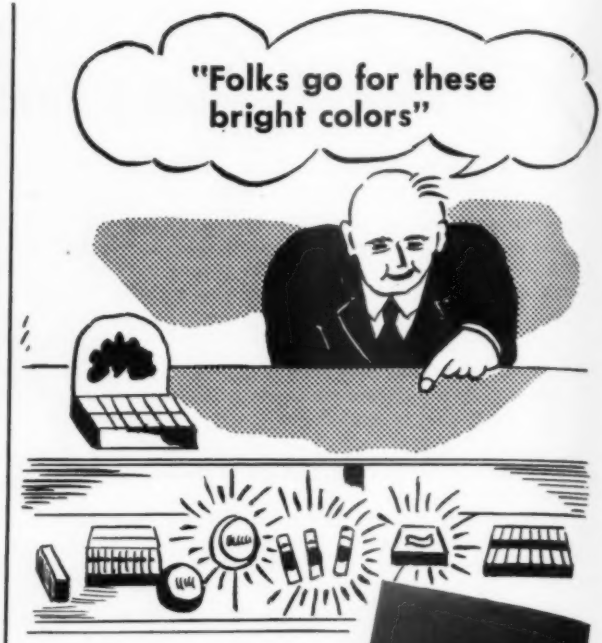
..is a habit with Barnett --Too!

Perhaps because we, too, specialize in packaging we have a great deal of respect for the lowly hen. She manages to do one of the world's best packaging "jobs"; Perfect in appearance, perfect in function and on time, every time.

Like the chicken, Barnett is constantly on the job; making delivery as promised, every time, on time. That's one reason Barnett customers are so well satisfied . . . . and since WE HAVE *NEVER FAILED* TO MAKE DELIVERY WHEN PROMISED we think we have something to cackle about.

SAMUEL Barnett COMPANY
TURNER & MASCHER STS.
PHILADELPHIA 22, PA.

For Four Generations, Manufacturers of Distinguished Paper Boxes for Distinguished Products



If you want colorful packaging

There's nothing like color to catch the eye and the buy of customers today. That's one of the many reasons why products go over so big in Lusteroid vials and tubes.

These modern plastic containers come in all colors of the rainbow—clear or opaque. They are strong, rigid and unbreakable—yet light as a feather. Your name and message can be printed as an integral part of the container to save money on labeling. You save on packaging and shipping, too.

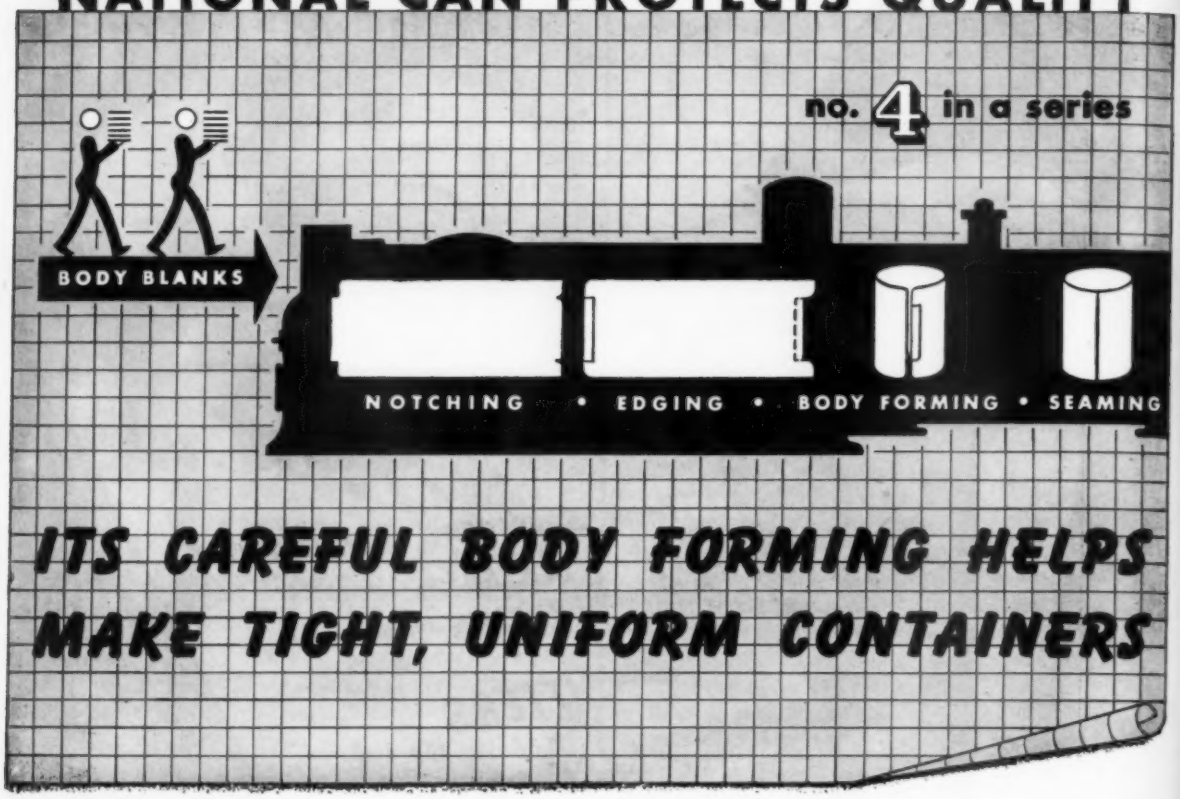
Sizes from ¼ to 1¼ inches in diameter and lengths up to 6 inches. Cork, screw-cap or slip-on closures. Write for details.

LUSTEROID CONTAINER CO., Inc.
Formerly Lusteroid Division of Sillcocks-Miller Company

Office and Factory
10 W. PARKER AVENUE, MAPLEWOOD, N. J.
MAILING ADDRESS: SOUTH ORANGE, N. J.

116 WEST 14TH STREET, NEW YORK 11, N.Y.
PHONE: CHELSEA 3-6233 — CABLE: FURLAGMAN, N.Y.

NATIONAL CAN PROTECTS QUALITY


no. 4 in a series
BODY BLANKS
NOTCHING • EDGING • BODY FORMING • SEAMING
ITS CAREFUL BODY FORMING HELPS MAKE TIGHT, UNIFORM CONTAINERS

Users of metal containers gain by our careful operation and supervision of modern automatic can making machinery. The resulting tightness and uniformity of the finished can insure maximum product protection and prevent jamming troubles when container users operate their packing machinery.

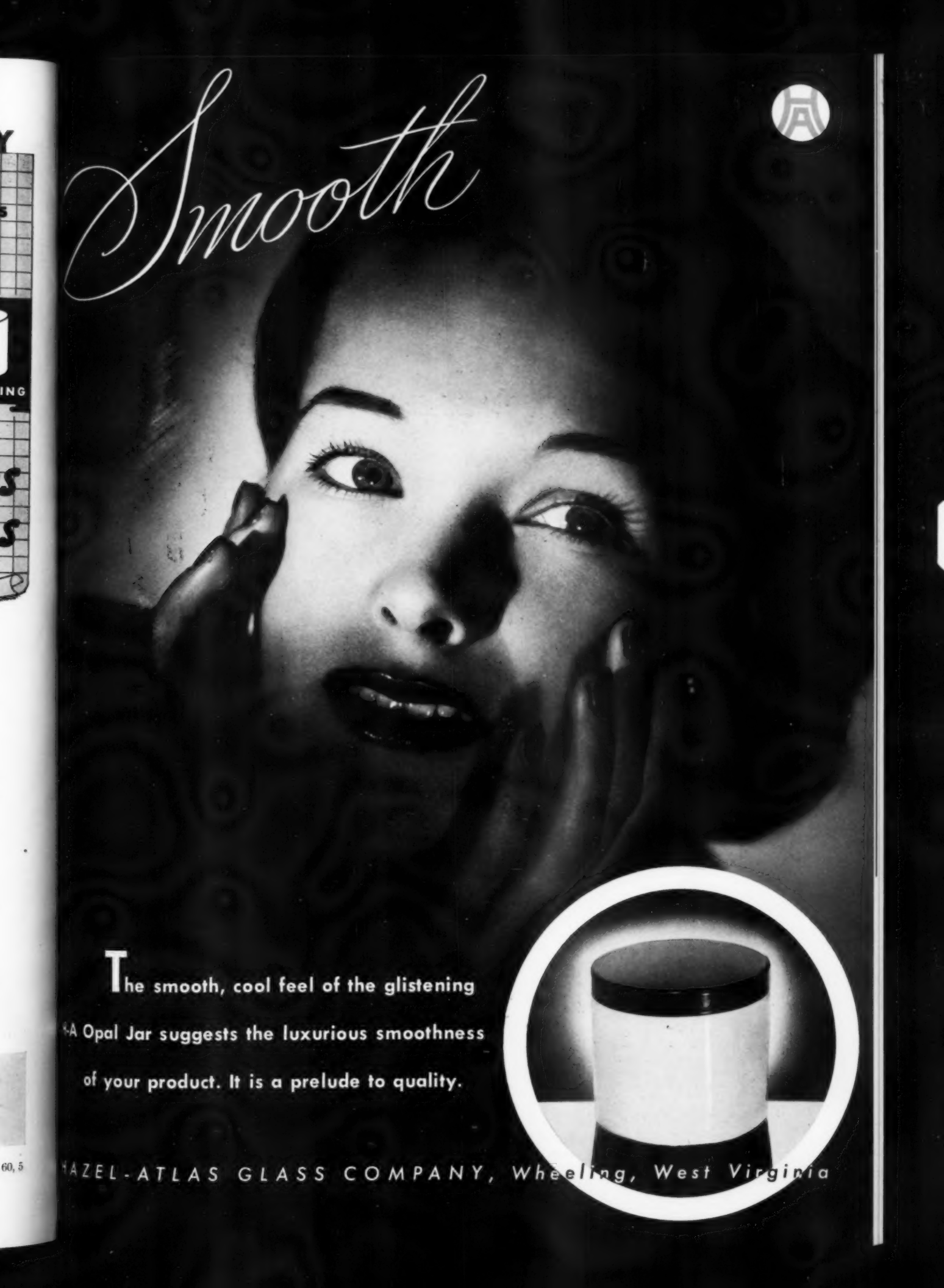
In body forming several steps are taken in succession on one long machine — at speeds too great for the eye to follow. From the bottom of a pile, body blanks are fed by vacuum cup to notching stations. From there they go to edging stations where turned edges are formed. Next they are bent into cylindrical form around a mandrel by means of two descending semi circular wings. The turned edges are then connected inside the newly-formed can cylinders to form seams. A flat-faced hammer flattens the just-made seams with a bump.

In this and further processes to be featured in later advertisements in the series, National Can's experience — of almost half a century's standing — is invaluable.

NATIONAL CAN
CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS IN: BALTIMORE, MD. · CHICAGO, ILL. · HAMILTON, OHIO · BOSTON, MASS. · INDIANAPOLIS, IND. · MASPETH, N. Y. · McKEESPORT, PA. · ST. LOUIS, MO.


Smooth
The smooth, cool feel of the glistening
H-A Opal Jar suggests the luxurious smoothness
of your product. It is a prelude to quality.
HAZEL-ATLAS GLASS COMPANY, Wheeling, West Virginia

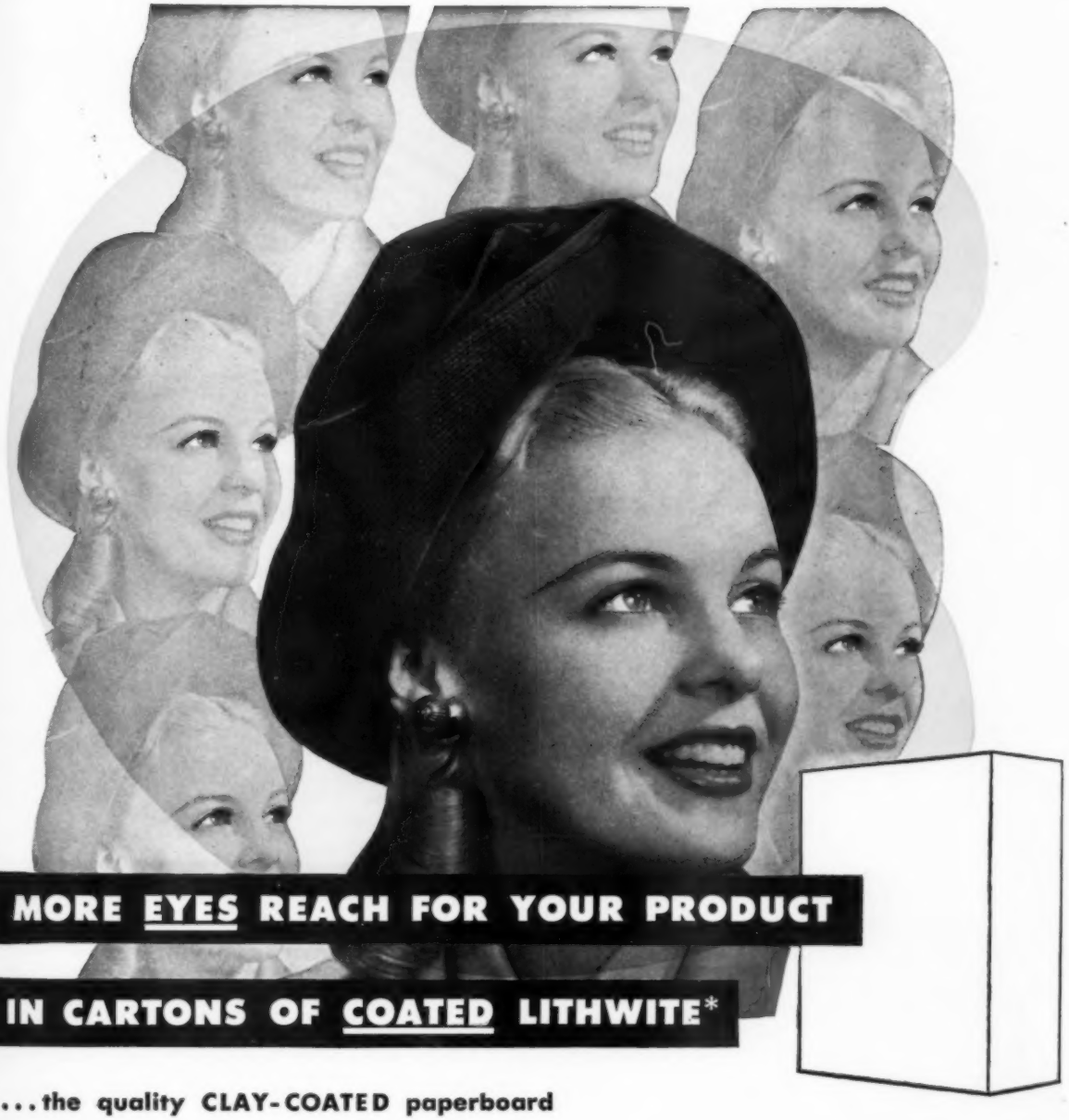
WRITE FOR SAMPLES

Just tell us the nature of your product and the sizes in which it is packed and we will be glad to send appropriate samples.

Also available in CLEAR glass

MARYLAND GLASS CORPORATION, BALTIMORE 30, MARYLAND

CHICAGO: Berman Brothers, Incorporated, 1501 S. Laflin Street
CINCINNATI: J. E. McLaughlin, 401 Lock Street
JERSEY CITY: Maryland Glass Corporation, 50 Journal Square
KANSAS CITY: Aller Todd, 1101 Mulberry Street
MEMPHIS: S. Walter Scott, 608 McCall Building
ST. LOUIS: H. A Baumstark, 4030 Chouteau Avenue
SAN FRANCISCO: Owens-Illinois Glass Company, Pacific Coast Division, 320 California Street.



MORE EYES REACH FOR YOUR PRODUCT

IN CARTONS OF COATED LITHWITE*

...the quality CLAY-COATED paperboard

The extra eye-catching quality of *Coated* Lithwite begins even before its clay coating is applied. For there are 89 years of papermaking skill behind the precision-made base of *Coated* Lithwite . . . skill and exacting engineering which account in great measure for the evenness and fine printing qualities of the finished sheet. Gardner-Richardson's eight years of experience with the revolutionary straight-through process by which Clay-*Coated* Lithwite is produced, is further guarantee of brighter, crisper cartons that stand out on the shelf. Production is still sold up. But now's a good time to call in Gardner-Richardson, let us show you how our famous carton craftsmanship can team up with *Coated* Lithwite to give your product a big shelf and display advantage.

The quality clay-coated paperboard for modern merchandisers. Coated Lithwite is whiter, brighter. Its smooth chalk-free surface takes inks brilliantly, brings up colors vividly, uniformly. Rub-resisting. Fade-resisting. Easier to glue. Performance-improved for 8 years.

A product of THE GARDNER-RICHARDSON CO.

Manufacturers of Folding Cartons and Boxboard, Middletown, Ohio

*Reg. U.S. Pat. Off.

Sales Representatives in Boston, Chicago, Detroit, New York, Philadelphia, Pittsburgh, St. Louis.

Provocative is the word for packaging that captivates attention . . . stimulates desire. Provocative, indeed, is the word for packaging that sells . . . continues to sell! In such packaging — in the artistry, in fact, that you find always at Warnercraft — are the reputations of worthy products truly enhanced. Investigate Warnercraft . . . your assurance of the utmost . . . in design . . . and quality. Just off the press, Warnercraft's new packaging booklet. Write for it.

WARNERCRAFT

"THE FINEST WORD IN PACKAGING"

THE WARNER BROTHERS COMPANY

Makers of set-up and folding boxes of all types, transparent acetate containers, hand made specialties, counter displays and dispensers. Main Office and Factory: 325 Lafayette Street, Bridgeport 1, Conn. • New York Sales Office: 200 Madison Avenue, New York 16, N. Y.

NEWS...

Van Antwerp Joins Searle & Co.

Lee Douglas van Antwerp, M.D., has joined G. D. Searle & Co., Chicago, to occupy the newly created post of medical editor. He has had many years experience in the writing and editing of medical journals.

DR. VAN ANTWERP

Dr. van Antwerp received his M.D. degree from the University of Michigan Medical School in 1931. From 1932 until 1947, barring his service in the Army Medical Corps, he has been connected with the Meriden State Tuberculosis Sanatorium, Conn., and consultant in chest diseases at the Meriden Hospital.

His Army service covers both World War I and II. He was a private in 1918 and went into the Medical Corps in the recent war as a captain, later being promoted to Lieutenant Colonel.

Frederick C. Barrett Visits Here

Frederick C. Barrett, of Parfums Reynard, New Quay, Cornwall, England, arrived in this country April 26 to visit friends in the trade and other numerous acquaintances here.

Mr. Barrett stated that conditions in England are still rather difficult, especially with the hard winter the country had to pass through this year.

Forster Heads New Company

Rene Forster Company, Inc., has become Allondon, Inc., with Rene Forster as president along with the same staff.

The new offices are located at 66 Dey St., New York. Telephone Cortland 7-1192.

At the present time, Mr. Forster is on an extended business trip to Europe, where he will visit Switzerland, Italy, France and Belgium.

Monfort Joins Cutter Labs.

Gordon Monfort has been appointed as advertising manager for Cutter Laboratories, it has been announced by Fred A. Cutter, vice-president in charge of advertising.

Mr. Monfort is well known in advertising circles, having served as head of Caterpiller Tractors news bureau in Peoria, Ill., prior to joining Cutter. A resident of California for many years before moving to Peoria, he had newspaper experience in Berkeley, Santa Barbara and Los Angeles.

Dr. Nolen Named Vice-President

Dr. Herman C. Nolen, professor of marketing at Ohio State University, has been appointed vice president of McKesson & Robbins, Inc., in charge of drug buying policies, succeeding the late B. H. Badanes.

Mr. Nolen, an authority on marketing, is familiar with many of the problems of manufacturers, wholesalers and retailers, through practical experience in store management.

Before joining the Ohio State faculty in 1934, Mr. Nolen was production superintendent of the Continental Motors Corporation, a store designer for the Grand Rapids Store Equipment Corporation and engaged in retail store operation. In 1941-1942 he was chief consultant for the Office of Civilian Supply, War Production Board. He entered the armed services serving as an economic expert on the staff of General Eisenhower where he acted as chief of trade, transportation and labor board of Military Government. He saw combat service in all European theaters being discharged with the rank of Colonel.

Mehren Named to New Post

Percy C. Magnus, president of Magnus, Mabee & Reynard, Inc., has made known the appointment of G. F. "Jim" Mehren D. V. M. to the important post of general manager of the firm's midwestern area with headquarters at 221 North LaSalle St., Chicago. Prior to this appointment, Mr. Mehren was, for nine years, a member of MM&R's midwestern sales staff.

Born and raised in Chicago, he studied at St. Ignatius College, Chicago, and New Jersey State College at Rutgers University and graduated with the degree of Doctor of Veterinary Medicine in 1917.

He enlisted in World War I and was

G. F. MEHREN

commissioned 1st Lieutenant in the Army Veterinary Corps. However upon his release from the armed forces he decided to try his hand at selling. He became affiliated with the medicinal department of the Frankfort Distilleries and later joined the sales staff of one of the countries leading pharmaceutical houses, a position he held until his association with MM&R.

U. S. Vitamin Forms Casimir Funk Labs. Inc.

To conduct its newly expanded program of research and product development, the U. S. Vitamin Corporation, has formed the Casimir Funk Laboratories, Inc., as an affiliate concern.

Dr. Casimir Funk in 1912 gave the name "vitamine" to the substance which he isolated in 1911 from rice polishings and yeast. Following this epic work, Dr. Funk's research led to the postulation of the role of vitamin B_1 in carbohydrate metabolism.

Dr. Casimir's research in the many related fields of pharmacy and chemistry are being continued and expanded under his direction at the new laboratories which will operate at 250 E. 43 St., New York 17.

PENICK
FOR NATURAL AND SYNTHETIC ESTROGENS

In the production of natural and synthetic estrogens—as in many other basic materials—S. B. Penick & Company supplies pharmaceutical manufacturers with medicinals more than meeting all accepted quality standards . . . Manufactured under the direction of skilled chemists, these estrogens are constantly available.

GYNESTROL
(NATURAL *Estrogenic Substance*)

Derived exclusively from mares' pregnancy urine. Sold in bulk, with a firm guarantee of potency. Available in crystallizate powder form, in absolute alcohol and in vegetable oil solutions.

DIETHYLSTILBESTROL, U. S. P.
(Synonym: Stilbestrol)

The usefulness of this stilbene compound is widely known.

DIETHYLSTILBESTROL DIPROPIONATE

An ester of diethylstilbestrol, preferred by some practitioners.

HEXESTROL, N. N. R.

A therapeutic agent stated to possess some advantages over diethylstilbestrol.

S. B. PENICK & COMPANY

50 CHURCH STREET, NEW YORK 7, N. Y.
Telephone, COrtlandt 7-1970

S. B. PENICK & COMPANY · HIPPOCRATES · ASHEVILLE · NEW YORK · CHICAGO

735 WEST DIVISION STREET, CHICAGO 10, ILL.
Telephone, MOHawk 5651

Owens-Illinois Appointments

Herman K. Kimble, general manager of the Kimble Glass division of the Owens-Illinois Glass Company, has announced appointment of Stanley J.

STANLEY McGIVERAN

McGiveran as general sales manager and Maxson A. Eddy to be in charge of manufacturing for Kimble Glass. Both Mr. McGiveran and Mr. Eddy were elected vice presidents of Owens-Illinois at the last meeting of the board of directors.

Mr. McGiveran joined Owens-Illinois in 1927 upon graduation from the University of Wisconsin. In 1936 he became advertising and merchandising director and in 1938 was general manager of the Insulux Products division. In 1941 he became vice president and general sales manager of the Owens-Illinois Can Company. During World War II, he served several government agencies, including the War Department, on a consultant basis.

Mr. Eddy, vice president in charge of manufacturing for the Kimble division, is a graduate of the University of Connecticut. He first joined Owens-Illinois

MAXSON A. EDDY

in 1931 and served as manager of the Streator plant and then the Terre Haute plant. He joined the Kimble Glass Company in 1938 and was elected vice president and general manager of the company in 1939, serving in the capacity until the company became a division of Owens-Illinois in 1947.

K. M. Henry has been appointed chief engineer in charge of research and development for the Kimble Glass division. Mr. Henry is a graduate in chemical engineering from Stanford University. He joined Owens-Illinois in 1932 and was named manager of the San Francisco plant and in 1937 was transferred to Toledo in the newly organized general research laboratory. He became chief engineer of the Kimble Glass Company in Vineland in 1939.

Dr. Waters Appointed Director

The Zemmer Company, Pittsburgh, has appointed Dr. Kenneth L. Waters as technical director. Dr. Waters, formerly a pharmaceutical research specialist at Mellon Institute, has been

DR. K. L. WATERS

active in the revisional work of the new U. S. Pharmacopeia. Prior to his association with Mellon Institute, he was connected with the Federal Food and Drug Administration.

He is a graduate of Lynchbury College, the University of Maryland, and the University of Georgia.

Miller & Davie Dissolve Partnership

As of March 26, 1947, the partnership between Sue Miller and Flo Davie, operating as Da'Mille Cosmetic Company was dissolved. Flo Davie purchasing Sue Miller's interest.

The Da'Mille Cosmetic Company will continue to operate as in the past under the exclusive ownership and management of Flo Davie.

Horn Promotes 5

Raymond E. Horn, recently elected president and general manager of Abbott Laboratories, has announced the promotion of five men to higher executive sales positions.

David D. Stiles has been appointed associate director of sales and chairman of the sales executive committee. Mr.

DAVID D. STILES

Stiles is in his thirty-second year with Abbott. He served sixteen years as salesman professional representative and district manager. In 1934, he was appointed manager of the drug trade division of the company. Four years later he was named executive assistant sales manager.

H. S. Wilkinson is appointed general sales manager. He began work in the biological department in 1929. After several years, he became assistant secretary to the sales director of dermatological research laboratories, than a division of Abbott Laboratories. In 1933, he was added to the field sales staff.

E. E. Sweebe, D.V.M., A. R. Schramm and J. W. Addington, formerly assistant sales managers are appointed associate general sales managers of Abbott Laboratories.

Mr. Wilkinson is succeeded as East-

H. S. WILKINSON

Central divisional sales manager by Harold Clauson. Mr. Clauson joined the company in 1933 as a salesman after four years' retail drug experience. He became a district manager in 1944.

Perfumers Society Formed

The formation of the Perfumers Society of the Aromatics Industry, aimed "to advance the art and science of perfumery in the United States and to encourage and promote good fellowship and professional discourse among its members" has been announced.

Plans for a permanent organization were set in motion April 19 at a dinner attended by twenty-two representatives of nineteen essential oil and aromatic houses. The organization committee consisted of William Dunney, Sr., of Ungerer & Co., Samuel Klein of Synfleur Scientific Laboratories, Inc., and George Tombak of E. I. du Pont de Nemours & Co., Inc.

Elected at the meeting were the following officers: William Dunney, Sr., president; Anthony Frascati of Firmenich & Co., vice president; William H. Barlow, Orbis Products Corp., secretary and R. B. Houk, Dodge & Olcott Co., treasurer.

Regular dinner meetings of the society are scheduled for the third Wednesday evening of each month, except June, July and August.

Polak & Schwarz Opens Midwestern Branch

Louis Davids, executive vice president of Polak & Schwarz., New York, has announced the opening of the firm's Midwestern offices, laboratory and warehouse in Chicago, General offices will be maintained in the Chicago Daily News Building, 400 West Madison St., and laboratory and warehouse at 444 West Grand Ave.

The Midwestern division will be under the general management of George W. Liddell.

Argentine Representative Here

George N. Kirkner, who for twenty-five years has represented an American firm in the drug and cosmetic industry in Buenos Aires, has gone into business for himself as manufacturer's representative and commission agent.

Mr. Kirkner is interested in contacting drug, pharmaceutical and cosmetic manufacturer's and with manufacturers of raw materials for the drug and cosmetic industry with the idea of acting as their agent in the Argentine. He is at present in this country and until June 15 can be reached at 1254 E. 35 St., Bklyn. After that he may be contacted at Anasco 1728, Buenos Aires, Argentina.

Humoller Named Asst. Director of Research

Dr. Fred L. Humoller, formerly associate professor of biological chemistry at Loyola University School of Medicine, has been appointed assistant director of research for Raymond Laboratories, Inc., St. Paul, Minn., a division of the William R. Warner Co.

FRED HUMOLLER

He will be responsible for the biological and fundamental chemical research activities, working under the direction of Raymond E. Reed, director of all research and development activities of the William R. Warner Company in the cosmetic field. Dr. Humoller's main activities have been in carbohydrate chemistry and bacterial toxins.

Munro Visiting South America

A number of South American countries are currently being visited by A. F. Munro, export manager of Northam Warren Corporation, which does an extensive business in Latin America.

Mr. Munro will visit the Argentinian, Brazilian, Chilean, Peruvian and Ecuadorean representatives of Northam Warren, and he expects to return to New York early in the summer.

Dr. Schultz Leaves N. Y. Q.

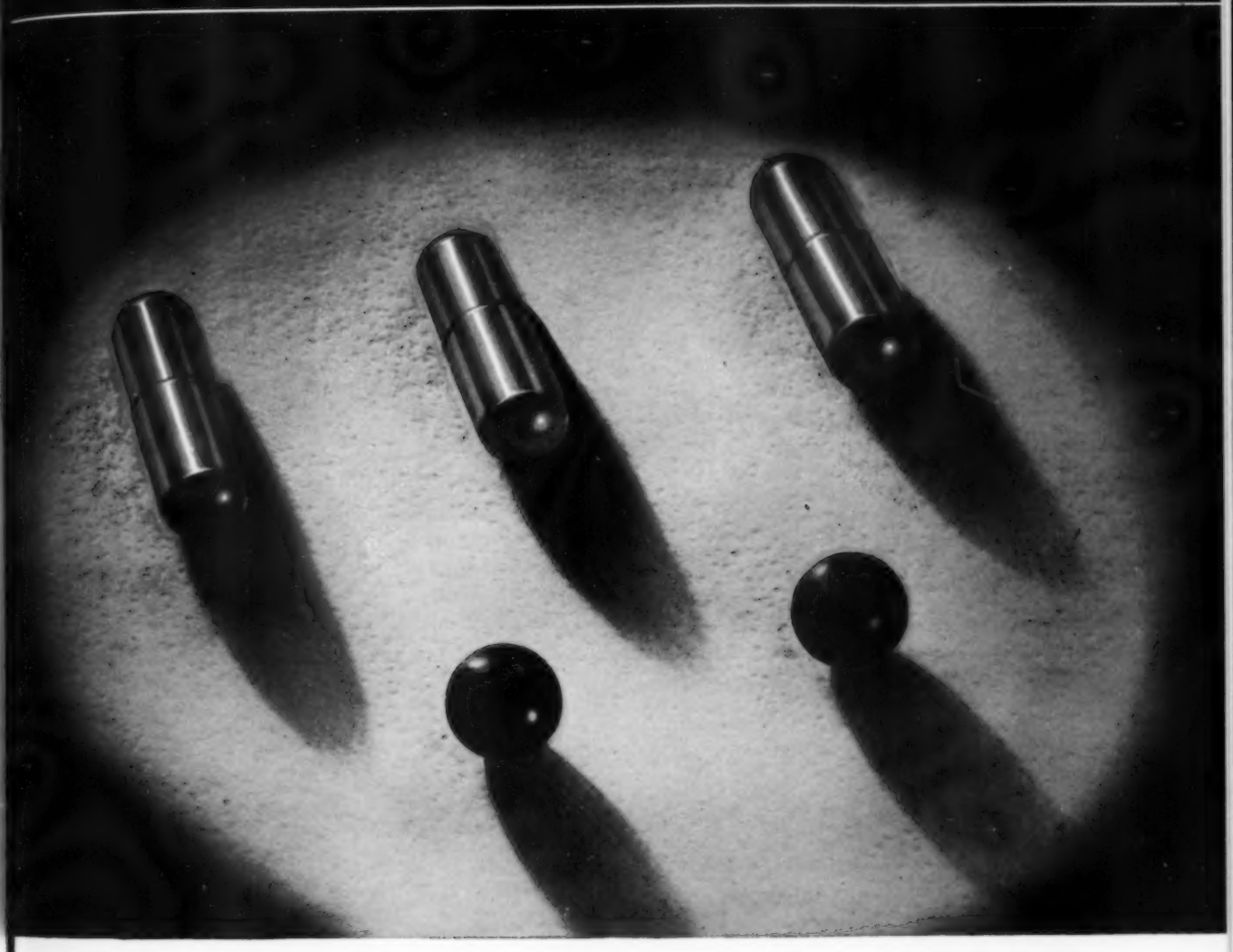
Dr. Joseph Schultz has resigned his position as research director of New York Quinine & Chemical Works to become associated with Lady Esther, Ltd., Chicago, effective May 1.

Dr. Grebe Wins Hyatt Award

Dr. John J. Grebe, director of physical research at the Dow Chemical Company, Midland, Mich., was presented with the John Wesley Hyatt Award for outstanding achievement in the plastics industry at Hotel Statler, Detroit, April 23. Charles F. Kettering, vice-president of General Motors Corporation, who said: "Dr. Grebe was chosen for the award for his work in the production of pure styrene during the war."

Peter A. Dirr, vice-president of Chas. L. Huisking & Co., New York, is the father of thirteen children. For many long years we have urged Mr. Dirr to have taken a group picture of his family. Finally, on the occasion of one of his daughters—Teresa M. Dirr —leaving to enter the Discalced Carmelite Monastery, Newport, R. I., the picture was taken. Shown in the front row, left to right, are: Margaret M., James Aloysius, Mr. Dirr, Teresa M., Mrs. Marie S. Dirr, Sabina M., Ann M.; Second row (seated): Helen M., Catherine M.; Third row (standing) Dr. John P., Francis Aloysius, Mrs. Marie S. Zimmerman, Gertrude M., Joseph F., Peter G.

You need all three* skills for capsulated minerals or vitamins



Fine chemicals of measured purity

Technical skill in manufacturing

Rigid laboratory control in your plant

Pictured are capsulated minerals containing Baker's Ferrous Sulphate, frequently prescribed by the physician when there is an increased demand for hemoglobin formation.

Drug and Pharmaceutical manufacturers in formulating these capsules are careful to select the iron that can be best absorbed by the human body. They go a step further. They develop a product through several skills.

They choose a quality fine chemical from a company that is known for the measured purity of its products.

They use infinite care in processing this ingredient scientifically into a quality finished product.

They maintain rigid laboratory control of the product every step of the way.

Baker's part is step one—to supply you with a fine chemical of measured purity that will enable you to make a trouble-free, dependable product.

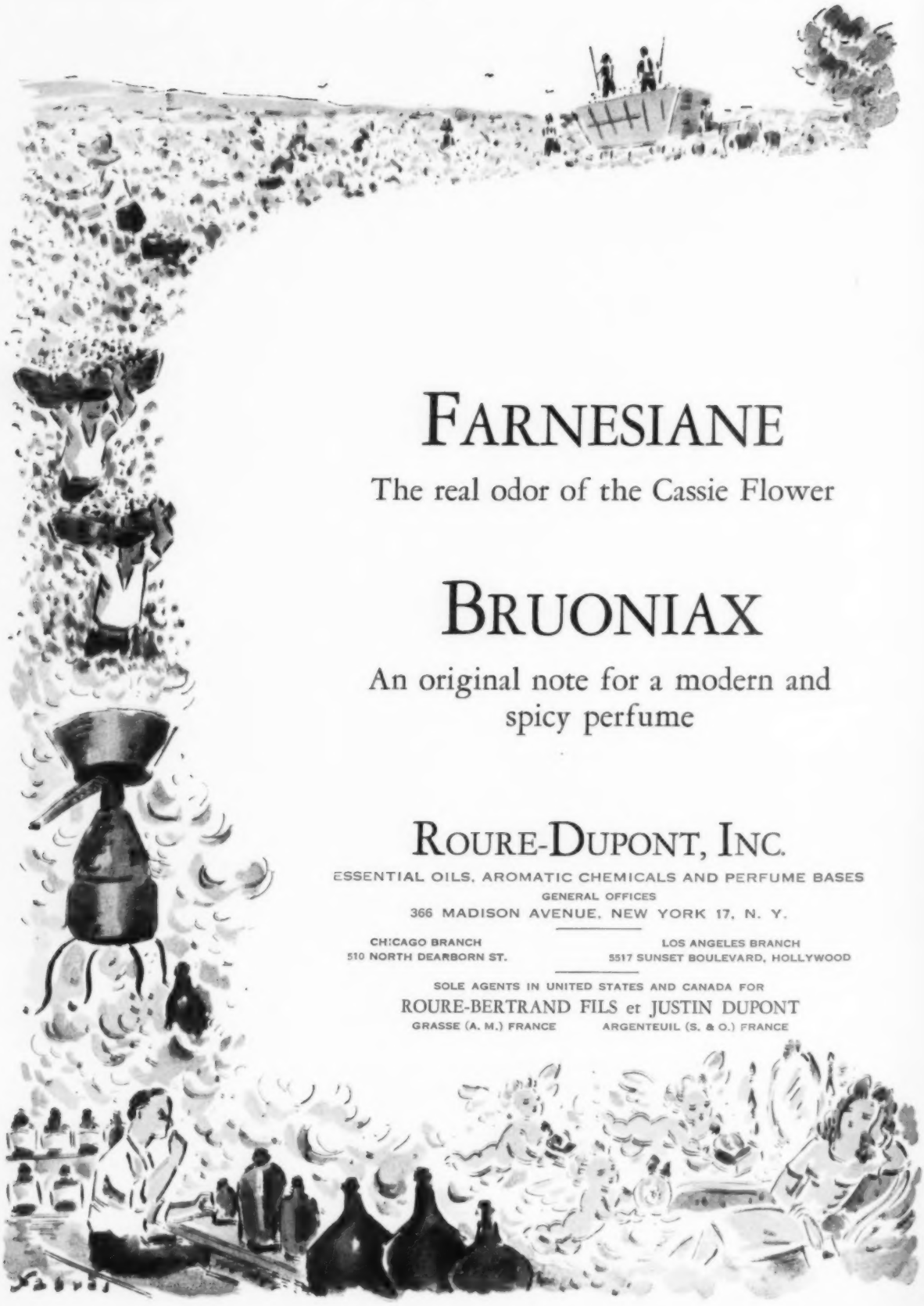
It is here that Baker excels. Measured purity to exacting and pre-determined standards has built Baker's reputation in the fine chemical field. The name Baker is synonymous with the phrase "Purity by the ton."

Regardless of what drug or pharmaceutical product you manufacture, if it requires one or more fine chemicals, be sure to specify Baker. Then you will be sure you specify quality at the beginning.

J. T. Baker Chemical Co., *Executive Offices and Plant:* Phillipsburg, N. J. *Branch Offices:* New York, Philadelphia, Boston and Chicago

Baker's

FINE CHEMICALS



FARNESIANE

The real odor of the Cassie Flower

BRUONIAX

An original note for a modern and spicy perfume

ROURE-DUPONT, INC.

ESSENTIAL OILS, AROMATIC CHEMICALS AND PERFUME BASES

GENERAL OFFICES
366 MADISON AVENUE, NEW YORK 17, N. Y.

CHICAGO BRANCH
510 NORTH DEARBORN ST.

LOS ANGELES BRANCH
5517 SUNSET BOULEVARD, HOLLYWOOD

SOLE AGENTS IN UNITED STATES AND CANADA FOR
ROURE-BERTRAND FILS et JUSTIN DUPONT
GRASSE (A. M.) FRANCE ARGENTEUIL (S. & O.) FRANCE

Two Join Lectrodryer Corp.

Pittsburgh Lectrodryer Corp., has retained professors E. R. Queer and E. R. McLaughlin, both of Pennsylvania State College, as consulting engineers in

E. R. QUEER

the fields of solid absorption, dehumidification and allied fields.

Widely known in engineering circles for his contributions to technical publications, Mr. Queer was appointed to his present post at Penn State after leaving the Navy with the rank of Commander in August, 1946. While in active service he was in charge of the development of dehumidification procedures for the preservation of the inactive fleets in the post-war Navy.

Mr. McLaughlin obtained B. S. and M. S. degrees in mechanical engineering

E. R. McLAUGHLIN

from Penn State College and joined the faculty of that college in 1939. He was appointed instructor in engineering research in 1941 and assistant professor in 1945.

Raymond Elected Director

At a meeting of the board of directors of G. D. Searle & Co., Dr. Albert L. Raymond, vice president in charge of research, was elected to the board, increasing the number of board members from seven to eight.

King Resigns From Anchor Hocking

C. Dudley King, vice president and director of the Anchor Hocking Glass Corporation, and associated with the company since 1925, resigned as of April 1, according to an announcement by Wm. V. Fisher, president.

Dunkel & Co. Name Hughes

Paul A. Dunkel & Co., Inc., New York, have appointed John A. Hughes as their Los Angeles representative with offices located at 916 W. 53 St., in that city.

M. E. Bouge Visits Here

M. E. Bouge, president of Bruno Court S. A., Grasse, France, arrived in this country April 7 on the Queen Elizabeth, to confer with Bruno Court's representatives in this country, Naugatuck Aromatics.

Mr. Bouge is president of the Syndicate of Essential Oil Producers of Grasse, and is also the son-in-law of the late A. Blanque, former president of Bruno Court.

Schieffelin Quarter Century Dinner

The annual dinner meeting of the Quarter Century Club of Schieffelin & Co., held April 11, at the Nikolaus Restaurant, New York. Forty-one of the forty-eight members were present.

John Skelly, acted as toastmaster and the only speaker of the evening was the president of the Company, W. J. Schieffelin, Jr., himself a member of the Quarter Century Club.

United Carr Expansion

Purchase of the Cosmetic Division of the Scovill Manufacturing Company, Waterbury, Conn., has been announced by H. S. Beddoe, president of United-Carr Fastener Company at Hamilton, Ontario.

To meet Canadian requirements for the products of this newly acquired division, United-Carr has purchased a new plant at Oakville, Ont. Here will be installed the most modern equipment for the manufacture of lipstick containers, compacts, rouge boxes, eye-shadow pencil parts and other metal products for use by the cosmetic industry.

Herbert A. Roden, will be general manager of the new company, and A. C. Morgan will be sales manager. The transfer of the machinery will be made as quickly as possible and the plant put into production with the utmost speed.

Burroughs Wellcome Appoints Two

S. H. Jaros, M.D., has joined the medical department of Burroughs Wellcome & Co., where he will be associated with Dr. D. S. Searle, medical director.

DR. S. H. JAROS

Dr. Jaros graduated from New York University with a B. S. degree and obtained his M.D. from New York University College of Medicine, following which he interned at the French Hospital, New York. He served in the Army Medical Corps from 1942 to 1945.

M. E. Polinger, who has also joined the staff of the medical department, graduated from the University of Pennsylvania in 1935 with an A. B. degree, following that he had further medical and advertising training and experience. His principal duties will deal with the

M. E. POLINGER

preparation of medical copy for literature and journal advertising.

25th Year for Felton Chemical

Felton Chemical Company, Inc., Brooklyn, celebrates its 25th Anniversary this year with an extensive expansion program, which includes a new building to house storage, manufacturing, and research facilities. J. G. Kaufman, assistant director of research, will be in charge of the new chemical laboratory.

Insect Repellent!

CREAM

LOTION

Sun-Screen Lotion
Skin Freshener
Astringent Lotion
Body Powder
Make-up Lotion
Make-up Cake
Lipstick
Rouge Dry
Rouge Cream
Cleansing Cream
Night Cream
Hormone Cream
Hand Lotion
Hand Cream
Brilliantine
Hair Tonic

ADVANCED Cosmetics inc.

38-31 CRESCENT STREET
LONG ISLAND CITY, N. Y.

Private Brands

Dr. Elkas Made Director

Dr. Robert W. Elkas has been appointed as assistant director of pharmaceutical control for Sharp & Dohme, Inc.

Dr. Elkas was associated with Purdue

DR. R. W. ELKAS

University where he served as a Fellow of the Purdue Research Foundation and had been engaged in research in pharmaceutical chemistry.

A graduate of the Massachusetts College of Pharmacy, Dr. Elkas earned his Ph.D. in pharmaceutical chemistry at Purdue.

Maison Evilya Purchases Spooner Inc.

Spooner, Inc., cosmetics manufacturers has been purchased by Maison Evilya under the head of Hyman Doctor, and will continue to do business under the name Spooner, Inc.

The company will occupy the four-story building at 417 W. 126 St., New York 27.

Roush Joins Rogers

Edgar A. Rogers, has announced the association of Chester A. Roush, Jr., with his business. Mr. Rogers' business as the analysis of process plant requirements and the application of equipment specifically engineered to meet special as well as ordinarily encountered conditions.

Mr. Roush is a chemical engineering graduate of Georgia Tech. who has returned from over three years duty with the Navy as a lieutenant in Submarines.

Ellenbogen Joins Smith, Kline & French

William C. Ellenbogen, formerly with the York Corporation, York, Pa., has joined the research staff of the Smith, Kline & French Laboratories.

Dr. Waksman Wins Passano Award

Selection of Dr. Selman A. Waksman, microbiologist at the New Jersey Agricultural Experiment Station, as the 1947 recipient of the Passano Foundation Award has been announced by the board of directors of the foundation. Presentation of the $5000 cash award will be made at a dinner to be attended by about 100 outstanding medical men at the Ritz-Carlton Hotel, Atlantic City on June 12.

Established in 1943 by the Williams & Wilkins Company, medical publishers, Baltimore, the Foundation proposes to encourage medical research, especially that which has clinical application.

Dr. W. A. Feirer (left) in charge of Sharp & Dohme's medical research division, describes a new research project to Dr. Herbert E. Carter (center), professor of biochemistry, University of Illinois, while on tour through the Company medical research laboratories in Glenolden, Pa. With them is Dr. L. E. Arnow, director of research.

Bloom Made Director of Sales

Joseph E. Bloom, member of the executive staff of the Glemby Company, has been named vice president and director of sales and advertising of

JOSEPH E. BLOOM

the House of Westmore, Inc. Henry Hennebeul has been made sales manager.

Fritzsche Brothers Opens Dallas Office

A new branch office located at 2208 Main St., Dallas, Texas, has been established by Fritzsche Brothers.

In charge of the new office will be Charles H. Milton, Jr., who for some years has been active in the New York firm's New England territory. For the present, Mr. Milton's former accounts will be handled by M. J. Niles, manager in charge of the Boston office and a veteran of many years with Fritzsche Brothers.

In order to make the rounds of his territory, Mr. Milton plans to do a major part of his travelling by air. He will take in the entire state of Texas, as well as Oklahoma, Arkansas, Louisiana and Mississippi.

Katz Forms Own Company

Meyer K. Katz, formerly affiliated with Volupte Compacts Inc., and its cosmetic affiliate, The Herb Farm Shop, Ltd., as vice president and sales manager, has formed M. K. Katz & Co., with offices in the Empire State Building, for the distribution to the retail trade.

Blakney Advanced by Colgate

J. H. Blakney has been elected vice president in charge of purchases of Colgate-Palmolive-Peet Co., at a meeting of the board. Mr. Blakney has been with the company since 1914 and has been director of purchases since 1934.

Butler Returns From Latin American Tour

Officials of Helene Curtis International, Inc., are facing Southward with expectancy toward a promising market

JAMES J. BUTLER, JR.

for beauty products and equipment in Central and South America.

The possibilities that lie in Latin America for the professional beauty trade had been inspired by a trip into Central and South American countries by James J. Butler, Jr., general manager for the company.

Butler's visits, completed recently, consisted of calls on distributors in Cuba, Puerto Rico, the Dominican Republic, Venezuela, Colombia, Peru, Ecuador, Panama, Costa Rica, Nicaragua, El Salvador and Guatemala.

Two Named to New Arden Posts

Robert P. Johns, has been appointed executive vice-president and general manager of Elizabeth Arden, Inc., and Ralph P. Lewis has been promoted to the post of vice-president and sales manager. Mr. Johns was formerly vice-president in charge of fashion merchandising at Paine's of Boston, Inc. Mr. Lewis has been sales manager with the Arden organization.

Universal Labs. Combines Offices

Henry W. Wittner, president of Universal Laboratories Inc., has made known the removal of the executive offices and showroom of the wholly owned subsidiary companies V. Vivaudou Inc., Kerkoff Ltd., and Delettrez Inc., from the Savoy Plaza Hotel, 761 5 Ave., New York, to 545 North Arlington Ave., East Orange, N. J.

The general offices and plant for these subsidiaries have been located at the East Orange address for the past six months, and it is anticipated that the consolidation of the offices will enable them to render faster and more prompt service.

Holland Named by Hill

Dr. Christian V. Holland has been appointed coordinator of manufacturing facilities of Sterling Drug Inc., by James Hill Jr., president. In addition to advising with the company's divisions and subsidiaries respecting technical and production problems, Dr. Holland will serve as a member of its production committee.

Born in Eastville, Va., in 1897, Dr. Holland was graduated from the University of Virginia in 1921. He later received a Ph.D. from Johns Hopkins University and a S. M. from MIT. He was for twelve years associated with Merck & Co. Inc., and during the war was a member of the United States Strategic Bombing Survey, active in surveying damage to synthetic oil, rubber and chemical plants in Germany.

Emile Schiengler and Son Visit Here

Emile Schiengler, head of Bertrand Frer's, S. A., Grasse, France, has arrived in this country with his son Hubert to visit their American representative P. R. Dreyer Inc., and numerous other friends.

Mr. Schiengler reports that conditions in France are still very uncertain and the industry is faced with the serious problems of rising wages to growers and government control, limiting various manufacturing operations.

Daughter to the Doyles

A 7 pound, 5¼ ounce baby girl was born to Mr. and Mrs. William T. Doyle on April 22. Mr. Doyle is associated with Lakeside Laboratories, Milwaukee.

Anstett Joins Bristol-Myers

Robert M. Anstett has joined Bristol-Myers Company, as specialist in trademarks and patents, according to an announcement by that company.

ROBERT M. ANSTETT

Mr. Anstett, a member of the New York State Bar Association received his L.L.B. from Columbia Law School in 1942. His war service included work in both the ETO and China for the O. S. S. He was discharged with the rank of first Lieutenant, after being awarded the Silver Star.

Borden Opens Chicago Offices

The Labco and Vitamin Products department of the special products division of the Borden Company has opened sales offices in Chicago. M. K. Harris, Jr., will head the new branch. Purpose of the office is to provide better service to the food and pharmaceutical trade in the midwest for natural A and D vitamin concentrates and milk proteins.

Ground has been broken for a new 10-story building to serve as administrative, engineering, and operating headquarters for Carbide and Carbon Chemicals Corporation at South Charleston, W. Va. The building is scheduled for completion in early 1948.

stol-
rade-
n an-

New
d his
ol in
rk in
S. S.
k of
arded

ducts
ts di-
has
I. K.
anch.
better
utical
A and
pro-

ering,
South

60, 5

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

May ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1947

Protein Synthesis Theory May Conquer Diseases

A new theory of protein synthesis, which may solve virus structure and lead to the conquest of some deadly diseases such as cancer and polio has been announced. By application of the new theory, hope exists that a "blue print" of protein structure may be obtained. Such a "blue print" would not only aid chemistry and all biological sciences, it is asserted, but also mark the beginning of "deductive medicine," offering the possible prevention and cure of a number of still troublesome leading diseases.

Fast Action Claimed for New British Anesthetic

A drug reported to be used for large or short term anesthesia, is one of Britain's current contributions to the pharmaceutical industry. It is said to be an ultra-fast-acting barbiturate with a higher safety factor than existing intravenous anesthetics. Chemically, it is the sodium salt of 5-(2-cyclohexenyl)-5-allyl-2-thiobarbituric acid.

New A.S.T.M. Standards On Cement Now Available

The 1946 edition of "A.S.T.M. Standards on Cement" presents in convenient form six standard specifications for Portland and other types of cement, as well as the latest approved physical and chemical testing methods. Copies are now available.

Two New Enamels Resist Heat, Acids

A ceramic coating which will withstand prolonged exposures to temperatures up to 1250 degrees F., and an acid-resisting porcelain enamel are reported to be two of the outstanding recent developments in the field of enameling. The ceramic coating, consisting of 80 per cent frits and a 20 per cent admixture of alumina, was used extensively by the Army and Navy on exhaust systems of aircraft and other engines. The acid-resisting coating is described as a titanium opacified porcelain enamel which produces sufficient opacity (white covering power) at 15 to 18 grams per square foot.

Hints on Solvent Safety Reduce Plant Accidents

Central storage and supervised distribution of organic solvents may prevent plant accidents such as fire, dermatitis and vapor poisoning, according to a statement issued by the Safety Research Institute. Proper and responsible handling of these chemicals would include correct labeling of solvent containers, and the issuing of requisition forms to check misuse, the Institute advises.

New Fields of Application Opened For Ethyl Acetate

Versatile Solvent and Chemical Used in Many Novel Organic Syntheses — New Analytical Method Announced

Ethyl acetate — perhaps the best known, most versatile, and most widely used nitrocellulose solvent — has been the subject of considerable research in the last three years, according to a number of papers published in scientific journals throughout the world. Highlighting chemical advances made on this compound is a new analytical method for its determination in the presence of acetic acid. Other discoveries involve a process for the recovery of ethyl acetate from aqueous solutions, and a number of new syntheses ranging from Grignard reactions to the preparation of 1-(2-pyridyl)-2-propanone.

COATINGS. New uses for ethyl acetate have appeared in recent years, but most important applications are still in the coatings field. This chemical is the best-known, most versatile and most widely-used solvent for nitrocellulose.

New Analytical Method

The standard method of determining ethyl acetate in the presence of acetic acid has always given erratic results owing to the consumption of alkali by acetic acid in an unpredictable manner, according to a paper published in an American scientific journal. The method proposed by the authors obviates this difficulty. This new method is said to produce extremely reliable results.

Recovery from Aqueous Solutions

Ethyl acetate may be readily recovered from aqueous solution by means of a method and apparatus described in a recent U. S. patent. According to the inventor, the solution is passed downwardly through an absorption filter containing a sorptive medium such as active carbon. The active carbon, in the form of grains, recovers the ethyl acetate.

The second phase of the process involves the freeing of the ethyl acetate from the sorptive medium. This is reported to be done by heating the activated carbon until the absorbed ethyl acetate is vaporized, then condensing the vapor.

(Continued on next page)

Printers' Type Now Made from Plastics

A new printers' type, said to be lighter and easier to store than the traditional metal type, is made from a thermoplastic molding material, according to a recent announcement. The type is claimed to be unaffected by corrosion or the effects of humidity and to produce better reproductions than can be obtained with metal type. It is also claimed that the wearing qualities are as good as conventional types.

Amyl Acetate Used in New Hydraulic Fluid

A new hydraulic fluid, said to be useful in gun recoil piston cylinders and shock absorbers, is described in a patent issued recently. According to the inventor, the new fluid has a boiling point of approximately —50 degrees F. and a Saybolt Universal viscosity in the range from 300 seconds at —40 degrees F. to 35 seconds at +200 degrees F. It is stated to be composed of amyl acetate, chloromethyl stearate, and a pour-point depressant.

New Roughness Tester

A new device that measures roughness and promises to improve quality and efficiency of rubber goods production has just been announced. It operates by measuring the resistance to passage of a stream of compressed air between the rough surface being tested and a smooth plate resting upon it.

ADVERTISEMENT—*This entire page is a paid advertisement*

May ★ **U.S.I. CHEMICAL NEWS** ★ 1947

New Fields of Application Opened for Ethyl Acetate

(Continued from page one)

New Synthetic Uses

Most recent of the new synthetic uses of ethyl acetate involves its reaction with lithium picolyl. According to a French paper, the reaction product is: 1-(2-pyridyl)-2-propanone.

Anthraquinone may also be manufactured from ethyl acetate, according to the claims made by a Russian scientist. In this synthesis, benzol reacts with ethyl acetate in the presence of aluminum chloride to form 9,10-dimethyl anthracene, which is readily converted by oxidation to anthraquinone.

Other new ethyl acetate syntheses are reported to produce ethyl iodide from iodine, mesitol (2, 4, 6-trimethyl phenol) from 2-mesityl-magnesium bromide, butyl ketone from butyl magnesium chloride, and tetra acetyl-silicates from silicon tetrachloride.

New Use in Plastics

A Russian process makes use of ethyl acetate to produce polyvinyl acetate. This compound is prepared by polymerizing vinyl acetate in the presence of ethyl acetate. The solid polymer is obtained by steam-distilling the solvent.

Standard Applications

Ethyl acetate is the standard medium-evaporating solvent for nitrocellulose lacquers. Some of the qualities that have contributed to its popularity are: low cost, ready availability, strong solvent power, speed of solution, mild and non-residual odor, and compatibility with practically all solvents, diluents, plasticizers, and resins in common use.

As a nitrocellulose solvent, ethyl acetate is used in the manufacture of artificial pearls and leather, lacquers, linoleum, plastic wood, washable wall-paper, and numerous other products. It is also employed in the preparation of candy glaze, embalming fluids, perfumes, smokeless powder, and rayon.

Commercial ethyl acetate is a solvent for cellulose acetate and is used along with acetone in the manufacture of cellulose acetate products, including artificial silk, film, sheeting, transparent paper, moulding powder and lacquer.

ARTIFICIAL LEATHER is made by a process in which ethyl acetate is an essential ingredient. Chemical research is opening new fields of application for this versatile compound.

Milder Iodine Tincture

The new edition of the Pharmacopoeia has just announced that the old 7 per cent tincture of iodine will be replaced by a 2 per cent tincture. The change is being made because the milder tincture is stated to be just as efficient as an antiseptic and a germicide, and to give no burning sensation.

Soapless Shampoo Formula

Since detergent soapless shampoos are freezable, alcohol in quantities varying from 10 to 20 per cent should be added to depress the freezing point, according to a recent announcement. Care is said to be necessary in allotting the proper amount of alcohol to prevent interference with the efficacy of surface active agents.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

A paint-spray protector, described as a plastic which can be applied with a brush, is said to provide complete paint spray protection. It is claimed to dry within five minutes, to be waterproof and airproof, and to peel off easily in large sheets. **(No. 190)**

USI

To withstand 3000 deg. F., a new concrete has been invented to fill a need in the construction of industrial furnaces. The material is supplied in dry form, ready mixed. **(No. 191)**

USI

A photographic slide rule is said to compute problems for photographers in a matter of seconds. Typical problems are: depth of field, gamma factor, and correct exposure with various meters. **(No. 192)**

USI

A new laboratory marking pencil features an automatic valve control for regulating ink flow, and may be carried around like a pencil, the manufacturer states. **(No. 193)**

USI

An antifouling paint is described as an improved type of coating that protects underwater surfaces against accumulation of marine organisms for up to four times as long as ordinary treatments. USI **(No. 194)**

To print photographs in the light, a daylight printing paper has been invented that is claimed to key a photographic emulsion to a narrow band of "black light," and to desensitize it to ordinary light. **(No. 195)**

USI

A new-type mothproofing compound, claimed to be effective for the life of the material treated, is described as being resistant to dry cleaning and laundering. **(No. 196)**

USI

To replace natural gums as printing thickeners, a new colorless starch derivative is now being marketed. **(No. 197)**

USI

An ice remover, described as a powder, is said to destroy ice upon contact. After the ice has been removed, an anti-freeze element in the compound will prevent the ice from re-forming, the makers claim. **(No. 198)**

USI

Quantitative odor determinations are now possible according to a new system which specifies the odor of any product or material in terms of a 4-digit number. Odor values are said to be judged by reference to objective standards. USI **(No. 199)**

A free specially prepared pamphlet for feed users and dealers on the use of riboflavin in feeds is now available. **(No. 200)**

USI

To produce a rust-resistant finish on steel parts that will not peel, rub off, crack or chip, is the purpose of a new product now on the market. USI **(No. 201)**

U.S.I INDUSTRIAL CHEMICALS, INC.

60 EAST 42ND ST., NEW YORK 17, N. Y. U.S.I. BRANCHES IN ALL PRINCIPAL CITIES

ALCOHOLS
Amyl Alcohol
Butanol (Normal Butyl Alcohol)
Fusel Oil—Refined

Ethanol (Ethyl Alcohol)
Specially Denatured—all regular and anhydrous formulas
Completely Denatured—all regular and anhydrous formulas
Pure—190 proof, C.P. 96% Absolute
*Super Pyro Anti-freeze
*Solox proprietary Solvent

***ANSOLS**
Ansol M
Ansol PR

*Registered Trade Mark

ACETIC ESTERS
Amyl Acetate
Butyl Acetate
Ethyl Acetate

OXALIC ESTERS
Dibutyl Oxalate
Diethyl Oxalate

PHTHALIC ESTERS
Diamyl Phthalate
Dibutyl Phthalate
Diethyl Phthalate

OTHER ESTERS
*Uniflex
Diethyl Carbonate
Ethyl Chloroformate
Ethyl Formate

INTERMEDIATES
Acetoacetanilide
Acetoacet-ortho-anisidide
Acetoacet-ortho-chloranilide
Acetoacet-ortho-toluidide
Acetoacet-para-chlo-anilide
Alpha-acetylbutyrolactone
5-Chloro-2-pentanone
5-Diethylamino-2-pentanone
Ethyl Acetoacetate
Ethyl Benzoylacetate
Ethyl Alpha-Oxalpropionate
Ethyl Sodium Oxalacetate
Methyl Cyclopropyl Ketone

ETHERS
Ethyl Ether
Ethyl Ether, Absolute—A.C.S.

FEED CONCENTRATES
Riboflavin Concentrates
*Vacatone 40
*Curbay B-G *Curbay Special Liquid

ACETONE
Chemically Pure

RESINS
Ester Gums—all types
Congo Gums—raw, fused & esterified
*Araplex—alkyds and allied materials
*Arafene—pure phenolics
*Arachem—modified types
Natural Resins—all standard grades

OTHER PRODUCTS
Colludions
Ethylene
Ethylene Glycol
Urethan
Nitrocellulose Solutions
dl-Methionine

Printed in U.S.A.

New

In
new
the
mark
the s

Th
build
build
pharm

Ad
orato
Here
cologi
comp
depar
ucts
trial.
which
syster
experi
most
ing ro
mittin
anima

The
and w
time
space.

The
plant,
pers, a
ment
diets r

Chamb

To f
of E.
treasu
and
J. L.
preside
S. Cha
tary a
and ad
how
created

The new
Los Ang

New Abbott Pharmacology Building

Inspection of Abbott Laboratories new pharmacology building April 25 by the company's research personnel marked completion and occupancy of the structure.

The new, air conditioned three-story building adjoins a smaller two-story building which formerly housed both pharmacological and bioassay activities.

Administrative offices and staff laboratories are located on the first floor. Here the senior research pharmacologists and technicians evaluate new compounds prepared by the research department and follow up these products until they are ready for clinical trial. An area on the second floor, which has a separate air-conditioning system, houses the animals needed for experimentation. Also on this floor is a most modern and well equipped operating room and a special laboratory permitting observations on larger groups of animals at the same time.

The third floor is as yet unassigned and will be used for storage until such time as expansion requires use of the space.

The basement houses a food mixing plant, including overhead storage hoppers, a large cold room and other equipment for the preparation of special diets required in quantity.

Chamberlain Sales Corp. Elections

To fill the offices vacated by the death of E. O. Preston, former secretary and treasurer of Chamberlain Laboratories and Chamberlain Sales Corporation, J. L. Comerford, besides serving as president was elected treasurer. Davis S. Chamberlain has been elected secretary and will continue to serve as sales and advertising manager. Harold Cahow was appointed to the newly created post of assistant treasurer.

Reed Appointed Director of Research

Elmer H. Bobst, president of the William R. Warner Company, has made known the appointment of Raymond E. Reed as director of cosmetic research and development. Mr. Reed will be responsible for the organization

RAYMOND E. REED

and direction of the cosmetic research of Richard Hudnut, Raymond Laboratories, Inc., Bathasweet Corporation, Courtley Ltd., and all other cosmetic and perfume companies controlled by the William R. Warner Company.

Mr. Reed was formerly vice president in charge of research and development for Raymond Laboratories, Inc., St. Paul, Minn., and will handle his new assignment from the main offices of the William R. Warner Company in New York.

Hinde & Dauch Book Tells of Industry's Development

Formulas for success in American Industry have been many. The one used by the founders of the Hinde & Dauch Paper Company called for a threshing machine, a straw baler and plenty of hard work.

How successful this prescription proved to be is the subject of "The Beginning of a Great Industry," a new book published by the firm for its stockholders and friends. It is a book which not only details the rise of Hinde & Dauch but also presents an illustrated story of the growth of the entire corrugated shipping box industry.

Centaur Enlarges Sales Staff

F. M. Deakins has been appointed assistant to R. E. Gray, sales manager of the Centaur Company division, Sterling Drug Inc.

Mr. Deakins will make his headquarters in the New York office, but, following the company policy, will join with Mr. Gray in spending considerable time in the field with the men. The division has recently added five new sales territories.

Joining the Centaur Company 16 years ago as a sales representative attached to the New York office, Mr. Deakins has spent most of the time in various field territories. A native of Chattanooga, he attended the University of Chattanooga, before starting business. Prior to joining Centaur he was with the old Colgate Company.

Hooker Booklet

A new edition of Hooker products, has just been published by the Hooker Electrochemical Company, Niagara Falls.

The new bulletin represents a new departure from previous products lists in that it comprises 20 pages of description, principal physical and chemical properties, graphic formulas, uses and shipping information.

Several new products and brief descriptions of the various chemical processes and facilities which Hooker has available for industry are also included in this General Products List. Copies are available to those interested when requested on company letterhead.

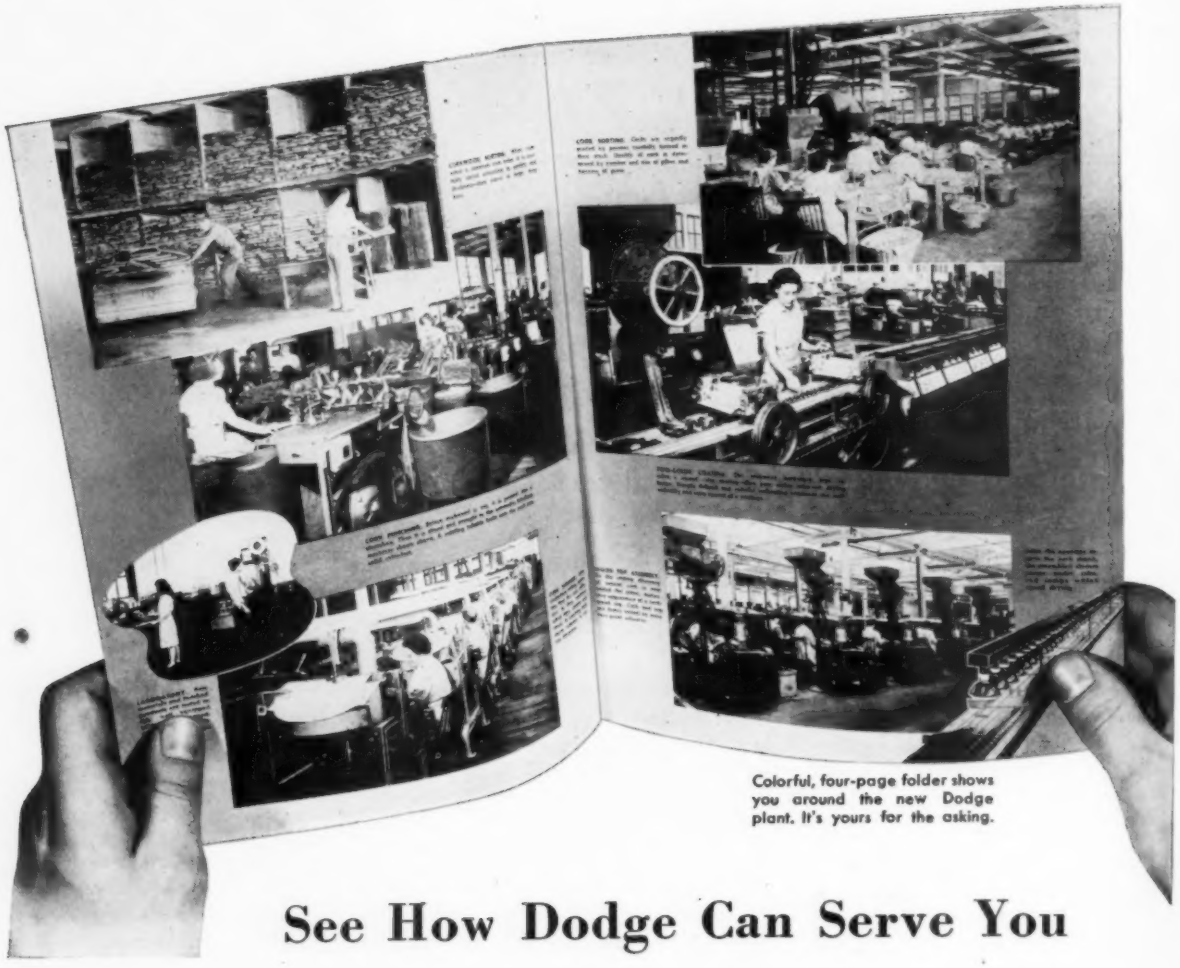
Commercial Solvents Opens New Offices

Commercial Solvents Corporation has opened two new district offices, one in Kansas City and another in Louisville, Kentucky.

A. B. Swearingen has been appointed district manager at Kansas City; he was formerly Southwest regional supervisor of CSC's specialties division. New district manager at Louisville is G. H. Snider who has for many years been associated with the Detroit office.

The new branch office of the Upjohn Company, located at 900 N. Cahuenga Boulevard, Los Angeles. Leo B. Austin is the sales manager and Milo C. McDonnel, office manager.

MAKING CORK CLOSURES TO SEAL AND SELL YOUR PRODUCT



Colorful, four-page folder shows you around the new Dodge plant. It's yours for the asking.

See How Dodge Can Serve You

YOU ARE witnessing the birth of perfect, air-tight closures—thousands of them. These photos were taken in the new, modern plant of the Dodge Cork Company, in operation since Fall 1946. Now, with an additional plant, Dodge aims to give customers even more efficient service than during the past 21 years.

For safe-sealing and extra sales appeal, many Dodge customers choose Dodge Milbossed-Top Corks. Cut to precise dimensions, the high-grade natural cork protects their products; the colorful, hardwood tops help sell them. Tops can be individualized to carry your name or trade mark . . . make your product a stand-out. Dodge Milbossed-Top Corks are available in a wide variety of sizes and colors. Send us your specifications.

DODGE CORK COMPANY, INC., LANCASTER, PA.

DODGE CORK CLOSURES

designed to Guard the Integrity of the Contents

Smith Advanced by Breon

George A. Breon and Company, have appointed Spencer W. Smith, manager of its Indiana-Michigan division num-

S. W. SMITH

ber 7. Mr. Smith formerly traveled a territory in Southeastern Wisconsin.

Duke Named Sales Manager

Meritt Chemical Co., Inc., Greensboro, N. C., has announced the appointment of Claude W. Duke as vice president and sales manager.

For the past six years Mr. Duke has been sales promotion manager of the pharmaceutical division of Standard Brands, Inc. Before that he was the regional manager of Schenley Distillers Corp., and at one time was with the Norwich Pharmacal Co., in a managerial capacity in the South.

Mr. Duke's primary activities will be the merchandising and distribution of Meritt Medicated Powder in the national market.

Hornecker Named by Trump

The appointment of Martin Hornecker as assistant general sales manager of Royal Pharmacal Corp., has been announced by F. J. Trump, president. Mr. Hornecker a veteran of 25 years in the drug industry will make his headquarters at the general offices in Brooklyn.

Squibb Advances Two

The promotion of John R. Callahan to plant engineer and the appointment of William Burdell Baker as technical director, product development division, have been announced by F. F. Berg, manager of the Brooklyn manufacturing laboratories of E. R. Squibb & Sons.

Mr. Callahan has had many years of experience in maintenance and utilities operations, having served prior to joining Squibb, for three and a half years in the Army as chief of utilities, Huntsville Arsenal, Ala.

Mr. Baker has recently returned from South America, where he was associated with the drug manufacturing firm of Laboratorios Uribe Angel as technical director of that firm's three plants in Colombia. Before this he was associated with the Calco Chemical Division, American Cyanamid Company, as director of technical service, pharmaceutical department.

Dr. Spline Retires

Dr. Robert E. Spline, director of the professional department of Bristol-Myers Company has retired from active service. He will, however, be retained by the company as a consultant to the professional department on a part-time basis.

Dr. Spline has had many years experience in the drug industry. He first joined Bristol-Myers in 1915. Five years later he resigned to become general sales manager of the Pepsodent Company and then director of the new products division of Vick Chemical Company. He returned to Bristol-Myers in 1932 as head of the professional department, in which capacity he has served ever since.

Commercial Solvents Open New Office

Commercial Solvents Corporation have opened a district branch office in Los Angeles, with Edward B. Driscoll appointed district manager. Mr. Driscoll was formerly connected with the San Francisco office.

The pharmaceutical division of the sales department have made some additions to their staff. Theodore J. Peasley at the Los Angeles office; William T. Kovacs in the New York office to cover the New Jersey territory; Arthur M. Syroth in Pittsburgh; Gilbert G. Dougherty in Cincinnati; and John E. Codding in St. Louis.

Pratt Made Sales Manager

G. D. Runnels, president of Dermatics, Inc., has appointed Carl P. Pratt sales manager for the retail store division in the distribution of Dermatics.

Mr. Pratt is a native of Texas, and before joining Dermatics he represented Primrose House, covering the Southwest area. During the war he served as a pharmacist with the 238th General Hospital in France and Belgium.

Bernard Badanes

Bernard Harry Badanes, vice president of McKesson & Robbins, Inc., in charge of general drug and sundries

B. H. BADANES

buying, died suddenly of a heart attack on April 22, while addressing a meeting of the National Wholesale Druggists' Association in Chicago. He was sixty-three years old and had been associated with McKesson & Robbins for eighteen years, joining the company in 1929.

A native of Lithuania, Mr. Badanes came to the United States as a youth, his family settling in Cincinnati. In 1898 he visited relatives in Boston, where he took his first job in a local drug store without pay. Five years later he completed his apprenticeship and passed examinations for registered pharmacist. He then joined the Jaynes Drug Company of Boston, considered a pioneer in the operation of multiple-unit stores.

Surviving are his wife, a daughter, Mrs. Eileen Demme and a son Albert, and stepson George Thomas.

Lucretia Vanderbilt Acquired by Tonics

The Lucretia Vanderbilt line of perfumes and toiletries has been purchased by Tonics, Inc.

Coutlee to Head Tuberculosis Fight

Douglas Wakefield Coutlee, director of advertising of Merck & Co., Inc., and editor of The Merck Report, will supervise the Advertising Council's forthcoming "Fight Tuberculosis" campaign.

The campaign is designed to reduce the death toll from tuberculosis by urging every American to have his or her chest X-rayed. The campaign will be conducted in co-operation with the National Tuberculosis Association, the United States Public Health Service and the Office of Government Reports.

Top off
YOUR BOTTLE OR JAR with a
RICHFORD METAL CLOSURE
Any Size Plain or Embossed Any Shape
or
Designed and Manufactured
to your Specific Requirements

RICHFORD
CORPORATION
221 Fourth Avenue, New York City
Represented in: St. Louis, Kansas City,
Chicago, Los Angeles,
Pittsburgh, Cincinnati,
Minneapolis

LOOKING FOR TIME AND LABOR-SAVING IDEAS?

Get this new
Free Ever Ready
Label Catalog!

Page after page of practical ideas for the smoother, safer, simpler functioning of all departments from office-to-factory.

Have a copy on the desk of all your key men!

Write today for a FREE COPY.

EVER READY *Label* CORP.
149 EAST 25th STREET NEW YORK 10, N. Y.

WE ARE PRINCIPALS ACTING in our OWN BEHALF

Willing to

PAY YOU
IMMEDIATE
CASH

For ASSETS or CAPITAL STOCK of
• INDUSTRIAL PLANTS
• MFG. DIVISIONS or UNITS

All transactions held in strictest confidence.
Personnel retained wherever possible.

ADDRESS: Box 1250, 147 W. 42 St., New York 18, N. Y.

PERFORMANCE
wins the Applause!

Few stars of stage or screen ever won lasting popularity on the basis of beauty alone. Meritseal has more to offer than mere beauty. There are mechanical features that contribute to Meritseal's success. Let us send you samples so that you can examine the unique construction . . . see the metal shell with the unique thread that spins on and off freely yet forms a positive air-tight seal . . . and the bright, sparkling coatings that are extra hard and tough, to resist scratching and scuffing.

Meritseal is available in a wide variety of sizes from 48 mm. to 89 mm., so when you write for samples be sure to mention the sizes that will fit your own packages.

MeritSEAL –

CROWN CORK SPECIALTY CORP.
Division of Crown Cork & Seal Company

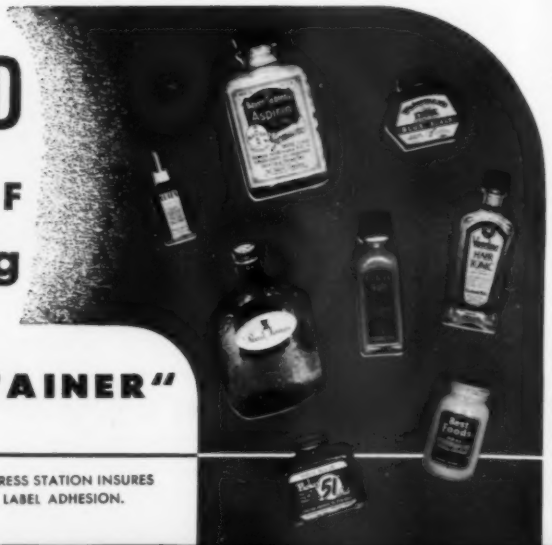
MAIN OFFICE: DECATUR, ILL. • NEW YORK: 60 EAST FORTY-SECOND STREET • CHICAGO: 106 EAST CHESTNUT STREET
WESTERN REPRESENTATIVE: WESTERN CROWN CORK & SEAL CORPORATION . . . SAN FRANCISCO . . . LOS ANGELES

ENGINEERED

FOR THIS KIND OF Precision Labeling

at

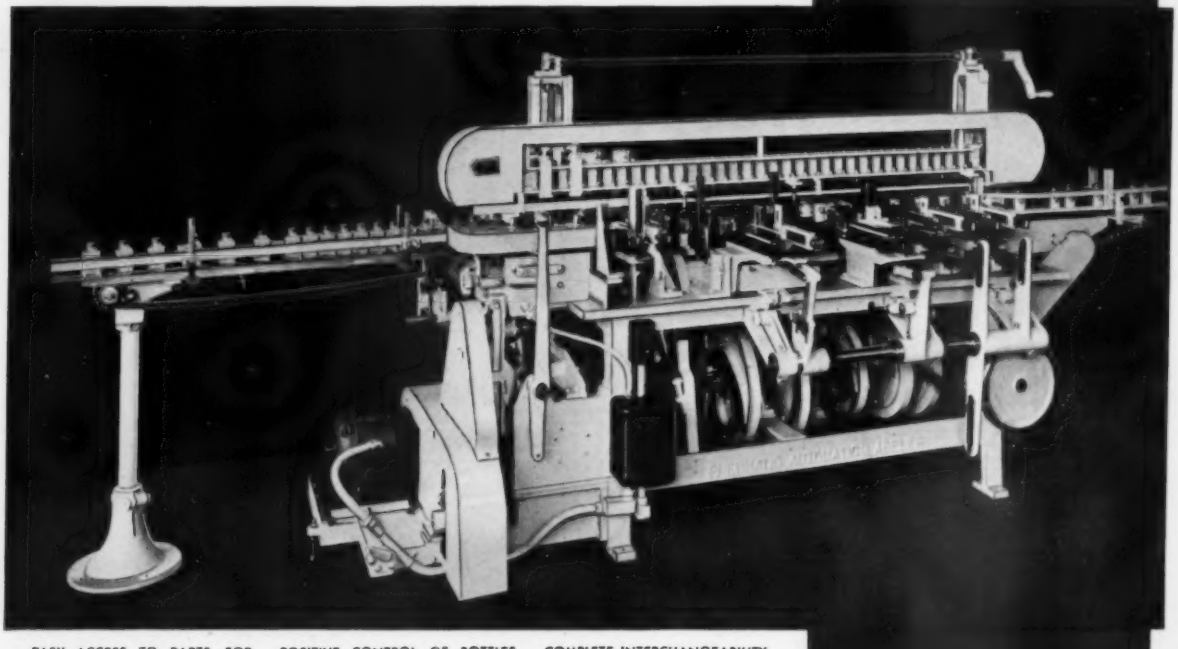
"LOWER COST PER CONTAINER"



DIRECT TRANSFER OF LABEL TO CONTAINER.

CONTINUOUS STRAIGHT-THROUGH INTAKE ELIMINATES IMPACT AND SHOCK.

DOUBLE PRESS STATION INSURES ALL-OVER LABEL ADHESION.



EASY ACCESS TO PARTS FOR CLEANING, LUBRICATING AND ADJUSTMENT.

POSITIVE CONTROL OF BOTTLES FROM START TO FINISH.

VARIABLE SPEED DRIVE IS STANDARD EQUIPMENT.

COMPLETE INTERCHANGEABILITY OF SPECIAL PARTS BETWEEN IDENTICAL PNEUMATIC LABELERS.

All the most effective and efficient time tested principles of automatic labeling are incorporated in this Pneumatic Duplex Labeler. Here is labeling brought to its very peak of perfection and precision by a company famed for its ability to build equipment that does the job better, and at a "lower cost per container". The list of leading companies who have selected Pneumatic labelers above all others and who are using this equipment with great satisfaction give testimony of its superiority. PNEUMATIC SCALE CORPORATION, LTD., 70 Newport Ave., North Quincy 71, Mass. : New York : San Francisco : Chicago : Los Angeles.

PNEUMATIC PACKAGING AND BOTTLING MACHINERY

Production Forum

By Francis Chilson

Industrial Consultant

Chemical Manufacture

There are a very considerable number of firms throughout the industry who are manufacturing synthetic organic chemicals of various kinds. Some of these firms were forced into the manufacture of such chemicals because they could not be obtained in the open market, owing to war conditions. The trend toward chemical manufacture seems to be increasing, and I am beginning to wonder if it's entirely wise. Whenever a pharmaceutical manufacturer produces his own synthetic organic chemical compounds, he should realize that these compounds must bear the entire overhead of the chemical manufacturing department. In some cases such compounds can be bought less expensively than they can be made. A chemical manufacturer whose business is to manufacture chemicals of various kinds, produces not only for an individual manufacturer or customer, but he also produces for the trade in which case his overhead is spread over a much larger volume of business, and hence he is, or should be, in a position to quote prices on such items lower than the manufacturing cost of the average pharmaceutical manufacturer. There are firms like Edwal Laboratories, Incorporated, of Chicago, who make a specialty of manufacturing synthetic organic chemicals for the industry generally, but they also make special chemicals for exclusive customers. Even in such cases the cost is likely to be much less than the individual customer can manufacture the item for himself. To operate a chemical plant is generally a costly venture because chemical apparatus is expensive to set up and to operate and costs so very frequently vary with yields. The operation of a chemical plant is really the function of a top-notch chemical engineer. In many pharmaceutical plants I have seen chemical manufacturing processes that must have been lifted out of high school text books. I have seen yields vary all over the lot. Of course, if a pharmaceutical manufacturer wants to get into the chemical business and produce specific items not only for his own use but for general sale, that's a horse of another color, and in such cases the pharmaceutical manufacturer is in direct competition with the chemical producers. To use a favorite expression of N. Y. Q.'s Frank Reid, "business is good when everybody makes a buck." While it is theoretically possible for a pharmaceutical or cosmetic manufacturer to make everything he uses, within limits, it is also practical to say "every man to his own trade."

The A.P.M.A. Convention

It will interest all the friends of Heyden's Fritz Degener, the genial maestro of Heyden's Chicago office, that at the Boca Raton Convention we elected him President of the Heyden Planetarium because he's such an excellent star gazer. Fritz is a very colorful character and he made his first fortune by selling buttons from Queen Marie's night-shirt. I hadn't supposed that they wore night-shirts in Roumania, and I have no idea how Fritz got so close to Queen Marie. No he's not Roumanian, although there have been times when he might have passed for an Indian, but I am quite sure of one thing based on circumstantial evidence that Fritz has a secret passion for dwarfs. Could it be that his lovely wife, Gertrude, is Snow White in disguise? Now that Fritz has developed a secret passion, I suppose he goes to work every morning singing "Heigh-ho, heigh-ho, it's off to work I go"! It will be all right for you to conduct inquiries into Fritz's private life from now on, but if you want the real lowdown, ask me. At the next A. P. M. A. convention I intend to make an exposé or an exposure or something. According to all accounts, I damned near did!!!

Packaging Show

The show was larger this year than usual. More machinery was exhibited. The two most outstanding units were the semi-automatic and automatic vacuum powder fillers exhibited by General Mills. These powder

STOKES
WATER STILLS

FOR LABORATORY AND SMALL-SCALE PRODUCTION

Stokes No. 171-E Electrically-heated Laboratory Still. One gallon per hour cap.

or

Stokes Multiple-Effect Still.

LARGE-SCALE DISTILLATION UP TO 5,000 GALLONS PER HOUR

All Stokes Water Stills, from small laboratory models up to the largest multiple-effect evaporators are used to produce exceptionally pure pyrogen-free water at low cost. This water is odorless, tasteless, chemically and bacteriologically pure and well within strict U. S. Pharmacopoeia standards — more than just free of electrolytes (de-ionized) where really pure water is essential.

These stills have been developed, improved and simplified. Into them are built the accumulated experiences of our 50 years as engineers and manufacturers of distilling and other specialized equipment for science and industry.

Stokes Stills are rugged, long-lived, simple in construction, easy to clean, economical to operate. More than 20,000 have been installed the world over.

Whatever your water still requirements, we invite your consultation. Write for catalog No. 41-S.

F. J. STOKES MACHINE COMPANY
5932 Tabor Road, Philadelphia 20, Pa.
Branch offices in New York and Chicago

F.J.Stokes **PHARMACEUTICAL EQUIPMENT** FJS Est. 1895

fillers originally were invented by Carter Engineering Company of Danville, Illinois. General Mills last year formed a packaging machinery division and took over these machines and re-designed them. The result is a beautiful streamlined job. Both machines operate at a high rate of speed entirely without dust. The automatic machine which was exhibited filling flour at a rate of 200 eight-ounce jars per minute. To my mind, these machines make obsolete all other types of powder filler. It can be used to fill bottles or cans with shaker tops; it can be used to fill pasteboard boxes. They are silent and dustless in operation and though they are somewhat more expensive than conventional powder packaging machines, they are 50% faster than the fastest of them. The finish of the machines is excellent. The belt intake of the automatic powder filler, for instance, is chromium plated and polished. As you know I have always been for streamlined equipment with a few bits of extra polish here and there. These refinements cost but little extra but they make a whale of a difference in the appearance of your plant. You can write the Packaging Machinery Division of General Mills at Minneapolis, Minnesota for full details.

Modern Design

The most streamlined exhibit I saw at the show was Carle Bigelow of American Cyanamid Company. Time was not so long ago when Carle couldn't see his feet. He hadn't seen them, I don't believe, for a good many years. Now he not only can see his feet but he actually can touch them. In case your diameter is a few diameters too ample, I'll give you Carle's recipe: no fat, no butter, no starches, no bread, no sugar, no desserts, no wine, no liquor—no nothing. All you have to do is to stick to this diet like Carle has done and then if you survive, you'll be streamlined too. Having a somewhat enlarged diameter myself which makes contemplating one's toes somewhat difficult, I think I'll have a go at Carle's diet some day. The hell of it is, I'm like Alexander Wolcott—everything I like is either illegal, immoral, or fattening.

The Scarsdale Office

You will recall that several years ago I established a Research Office at Scarsdale, New York, where my drawing boards are set up, and where the major part of my work is done. At that time I told my boys that one reason for setting up the Scarsdale office was to place the major part of our office activities within a few minutes drive of our respective homes. I told them also that I expected them to man the New York Office on Park Avenue and not to take advantage of the lovely surroundings which we enjoy in Scarsdale. They all assured me that the removal of the offices to Scarsdale would save them two hours a day commuting time and that therefore they could come to work at eight o'clock in the morning and stay until six, and still not work any longer over all, than they were then doing when they had to commute every day to New York. It's amazing what enthusiasm a move to the country will arouse. I visualized getting a lot more work out of the boys, but since we've been up here, if any one of them has arrived before nine o'clock in the morning or has been caught here after five p. m., I've not been aware of it. It's like pulling teeth to get the boys to spend some time at the New York Office. This is especially true since everything around our work office is now coming into full bloom. I know of a similar interesting case which shows how much more people like to work amid country surroundings. Sharp and Dohme as you know operate a plant in the city of Philadelphia and another one out at Glenolden in a beautiful park. It's a tough job to get the Glenolden boys to come into the city plant, and vice versa. About the only time you see any of the Glenolden Plant's boys in the city plant is when its raining or foggy, or otherwise inclement. Apparently there is something to locating a business amid vernal surroundings.

How to Run a Convention

Having been to all kinds of conventions over many years, I'd like to offer a few rules on how to run a convention—not that they'll do a damn bit of good. In the first place, the association should announce the speakers and furnish their memberships with epitomized biographies. This will save the Chairman's time, announcing the name and birth-marks of the next speaker.

It would be a good idea too, to circularize the copies of the speeches about a month in advance. Then we could listen only to those who obviously know what they are talking about.

Next, I would institute a fine system so that if any Chairman or speaker began (as they so very often do) their addresses with the usual corny joke, they would be subject to a fine of say—double drinks for everybody. Of course, a good dirty story always livens things up a bit and these should be accepted.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Electronic Package Weight Control

One of the most interesting features of the National Packaging Exposition in Philadelphia was the new electronic traffic "cop" that kicks out off-weight packages and flashes signals to govern adjusting of package filling machines, making possible large savings by a reduction of overfilling.

This machine, known as the "Weightrol," is manufactured by The Fred Goat Co., Inc., Brooklyn. The

"Weightrol" provides continuous filling weight control by check weighing every package and indicating whenever the filling machine is filling above or below the limits of its inherent filling error. At the same time, the machine automatically ejects every underweight pack-

age from the line. Ejection is selective and when the "Weightrol" is used to control filling machines packaging expensive materials, it is sometimes set to eject both the overweight and underweight packages. The machine is selfcontained and operates without breaking into the packaging line.

The indicating device known as a weight frequency indicator looks very much like an ordinary traffic signal. Its function is to warn operating personnel located anywhere on the packaging floor whenever a filling machine needs checking or adjusting. Furthermore, the weight frequency distribution of the packages as indicated by the pattern of the flashing signal lights guides the operator in making the adjustments that will bring the fill back into control. As a further air in the adjustment of filling machines, a drift indicator tells how far the average weight of the packages has shifted from the assigned average.

Wide Plastic Coated Belting

The Buffalo Weaving & Belting Company, have developed Plastex, conveyor belting, 72 inches wide. A new process in its manufacture has made possible the increase of 24 inches over the former width limitation.

Drug and Cosmetic manufacturers whose products are likely to pick up odors or stick to uncoated belting will be interested to learn that the plastic coating specially processed on solid woven cotten belting is impervious to oils, greases, alkalies and moisture. This belting cleans easily, improves sanitation and will withstand temperatures up to 240° F.

Plastex is available in widths as narrow as two inches, coated on one or both sides and in two to ten ply construction. It is fully pliable and has a semi-smooth, semi-glossy finish and comes in lengths to meet any requirements. For more complete information, write to Buffalo Weaving & Belting Co., 208 Chandler St., Buffalo, N. Y.

Demineralizer Cuts Water-Treatment Costs

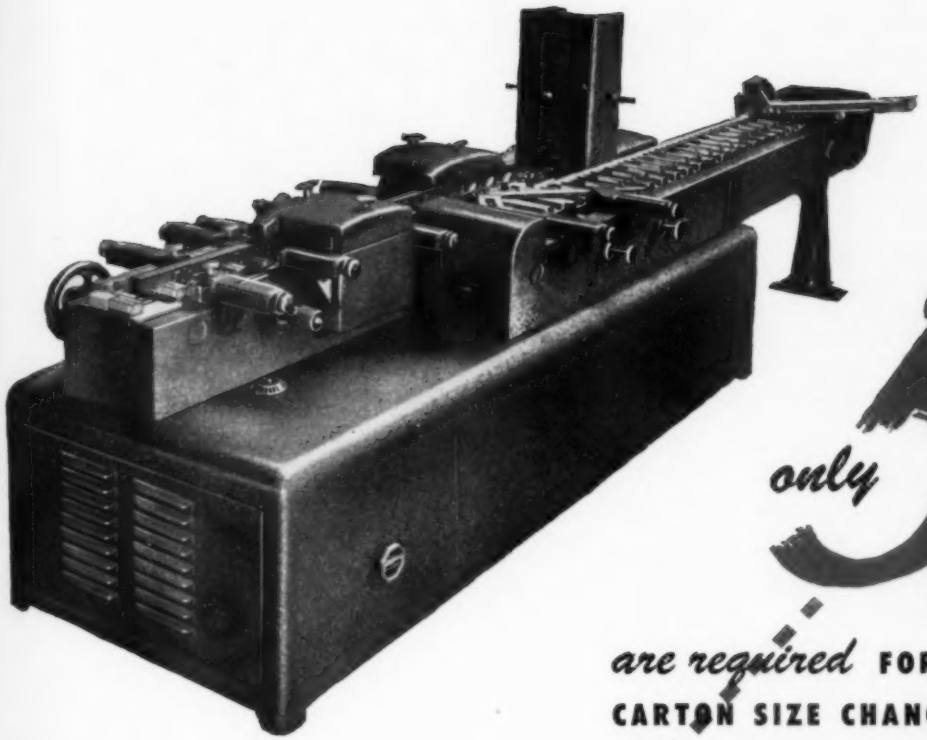
A new water demineralizer, known as the Model U-60, developed by the Ion Exchange Products department of American Cyanamid Company, has been put on the market. Designed to transform ordinary tap water into the chemical equivalent of distilled water, at a fraction of the cost of distilled water. It requires no heat, steam, no auxiliary equipment, and only enough electricity to light a 6-watt bulb.

The U-60 was made to operate at a 60 gallon per hour flow rate, and can be used to deliver water containing a maximum of 10 parts per million of ionized solids—or as little as 1 part per million. A "built-in" controller indicates the actual quality of all treated water leaving the unit, no auxiliary analytical tests are required.

Four columns containing alternate beds of "ionac" cation and anion exchange resins constitute the bulk of the unit. Water is passed through the four columns in series; the cation resin transforms the dissolved salts

present in the raw water into acids, and the anion resin then absorbs the acids.

When the red light on the controller glows, the resins have used up their capacity for demineralization. They are then regenerated by flowing dilute acid and alkali



only 5 *minutes*

are required **FOR A COMPLETE CARTON SIZE CHANGE-OVER ON A ROSS AUTOMATIC CARTONING MACHINE**

In practically every case, the ROSS system of 'dial control' makes this quick change-over possible . . . thus eliminating old style methods of interchanging parts, necessitating prolonged down time. This ROSS feature above is worthy of consideration when you contemplate the purchasing of an automatic or semi-automatic cartoning machine.

The ROSS machine inserts your product along with advertising literature, etc., and is available for handling:

1. Straight tuck folding cartons or reverse tuck folding cartons.
2. Seal end folding cartons.
3. Top tuck, sealed bottom folding cartons.

Illustrates a few of many size and shape cartons handled by the ROSS.

Additional* ROSS *features include

PRECISION PARTS	SELF OILING
DIAL CONTROLS	VERSATILE ADJUSTABILITY
MASTER SPEED RANGER	HIGH PRODUCTION

WRITE TODAY

A. H. Ross Co., Inc., Ludlow, Ky.

Gentlemen: Please send me without obligation, Catalog and Data on ROSS Automatic and Semi-automatic Cartoning Machines.

COMPANY_____

NAME_____

CITY_____ STATE_____

ROSS

ROCKWELL

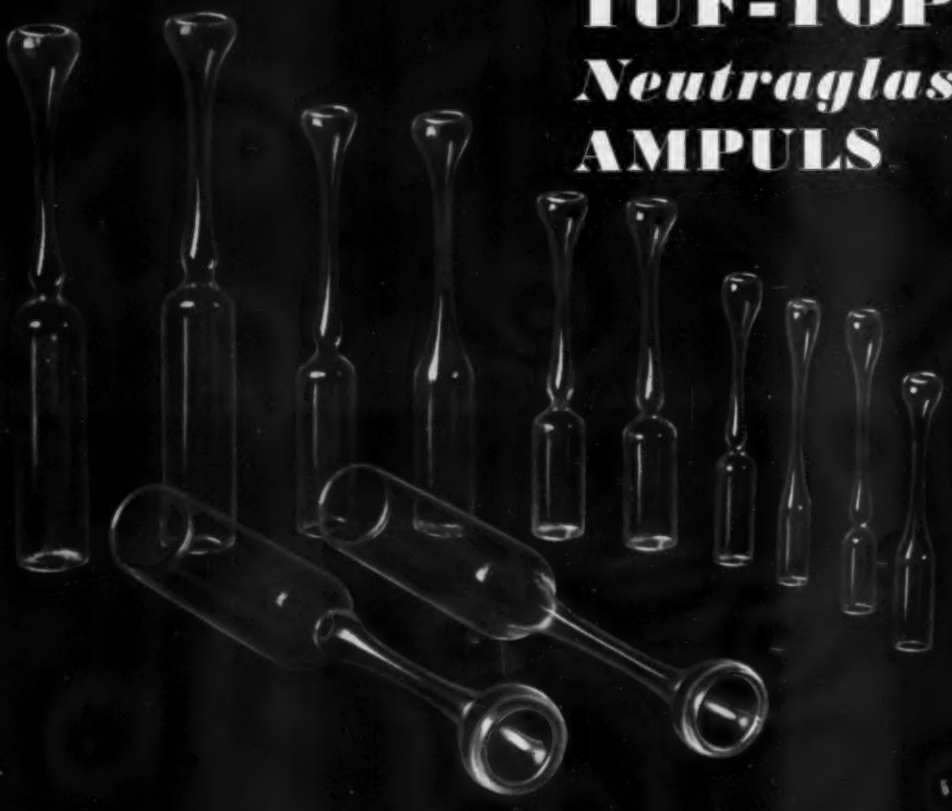
SUBSIDIARY OF THE ROCKWELL MANUFACTURING COMPANY

A. H. ROSS Co. Inc.

PACKAGING MACHINERY · LUDLOW, KY.

KIMBLE *ANNOUNCES*

New
TUF-TOP
Neutraglas
AMPULS



The top is tough. Enlarged opening with extra heavy glazed rim brings new freedom from chipping.

KIMBLE (K) **GLASS**

The Visible Guarantee of Invisible Quality

Vineland, New Jersey

DIVISION OF OWENS-ILLINOIS GLASS COMPANY

solutions over them, rinsed, and ready for reuse. The Model U-60 is completely assembled and ready for immediate operation as shipped. It requires only connection to the raw water line, and to drain and electrical outlets. Further information may be had by writing American Cyanamid Company, Ion Exchange Products Dept., 30 Rockefeller Plaza, New York 20.

Heavy Duty Drum Pump

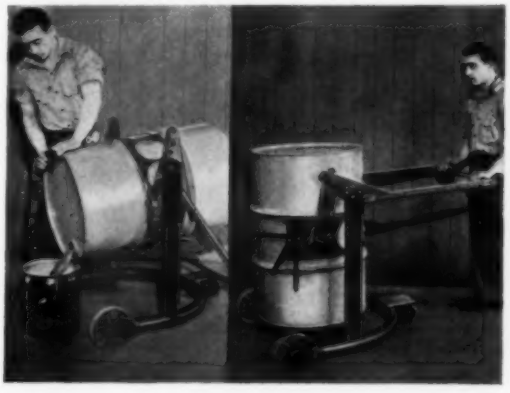
A new line of air-operated heavy duty drum pumps designed to meet the requirements of factories, for handling lubricants, oils, paints and many other compounds direct from original containers of 55 gallons capacity, has been announced by The Aro Equipment Corp., Bryan, Ohio.

The use of these pumps makes the handling of materials from drums an easier, cleaner, more convenient operation. There's no mess, no loss of material in handling, no contamination of material. There is also the added advantage of economy, since they operate at high efficiency on a minimum of compressed air.

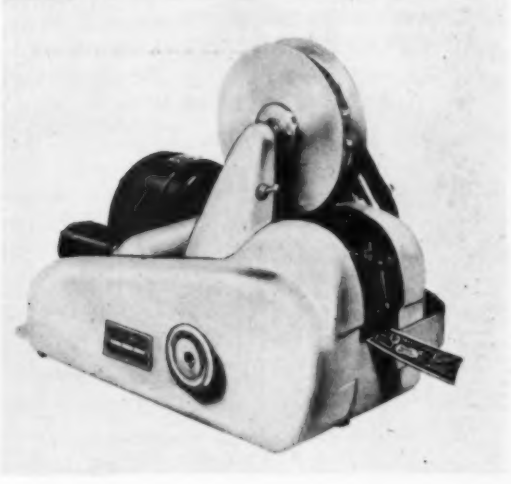
Improved Drum Handler

Designated Model No. 2 by the Falstrom Company, this drum handler offers simpler operation and greater durability. New gusset plate type lifting arms are made of heavier material and the drum saddle is a one piece stamped welded assembly.

The Barrel-Lift raises loaded drums off the floor with ease, transports the drum and is arranged for tilting to dispense contents. Drums may be rotated with little effort when thorough mixing prior to pouring is desired. Drums placed in the Barrel-Lift are maintained in a nearly balanced position and little effort is required for rotating or tilting.



Pick-up is simple with a safety-locked chain arrangement encircling the drum. Self locking safety stops, conveniently located provide finger tip safety control. The mechanical linkage of the lifter is adjustable to give several degrees of leverage permitting the handling of drums up to 750 pounds, gross weight. Saddle tilt locks hold open head drums in a vertical position during transport which effectively prevents tipping and spilling of contents. Drums may also be locked in tilted position. Use of the Barrel-Lift enables drums to be handled by one operator, safely and rapidly. The unit is heavy duty, all steel welded construction. Full data will be supplied on request to the manufacturer. Falstrom Company, Box 118, Passaic, N. J.



Band Label Dispenser

Miller Wrapping & Sealing Machine Co., has produced a new unit designed to simplify band labelling of small packages, and fully automatic in its functions. The Corley Band Label Dispenser automatically measures, moistens and cuts a new label from a roll of

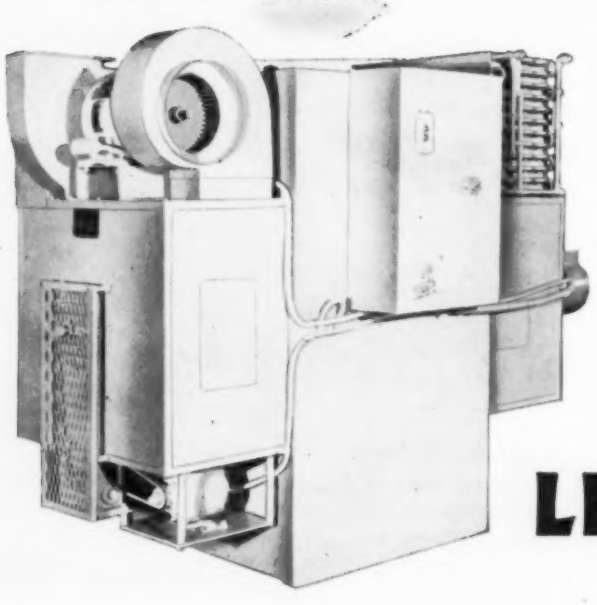
are you a prospect for a fog horn?

This Lectrodryer Dewpoint Tester will warn you of high humidities. Costs only $15. f. o. b. Pittsburgh.

A drop in the temperature reduces the atmosphere's capacity to hold moisture. So a fog settles down. Fog horns sound their warning.

Unfortunately, manufacturers don't often get this visible and audible warning that their processes are surrounded by too high a humidity. They learn the hard way—materials refuse to flow smoothly in chutes and conveyers, processes go wrong and products are inferior, or they deteriorate in storage.

Automatic controllers work with this Lectrodryer to hold down humidities.



Determine where moisture is causing you trouble. Then control those humidities with the help of a Lectrodryer; there's a standard machine ready to take over the job.

For advice on DRYing air, gases or organic liquids, get in touch with Pittsburgh Lectrodryer Corporation, 309 32nd Street, Pittsburgh 30, Pa.

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

LECTRODRYER

REGISTERED TRADEMARK U. S. PAT. OFF.

printed gum tape as soon as one is removed from the mouth of the machine. Thus a prepared band is always at the fingertips of operators.

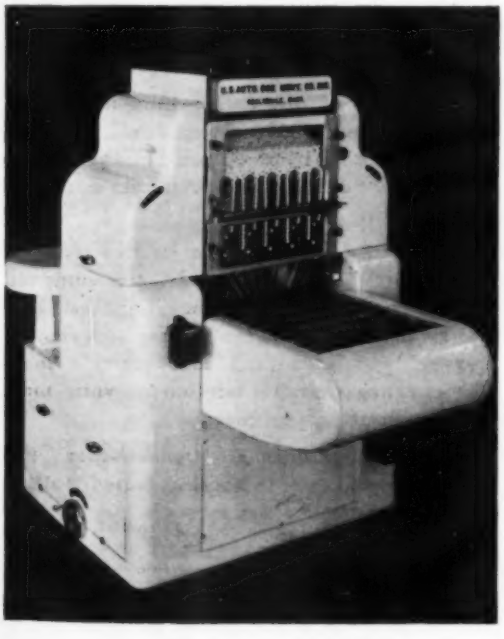
An additional advantage of the Corley device is that just enough of the band is moistened to seal the overlapping ends together, plus an extra fraction of an inch to "spot seal" the band to the package itself. This makes the label clean and easy to handle, and keeps operators' hands from becoming gummy.

The machine is equally useful for unprinted plain tape and for applications which do not require completely moistened bands.

Tablet Counter

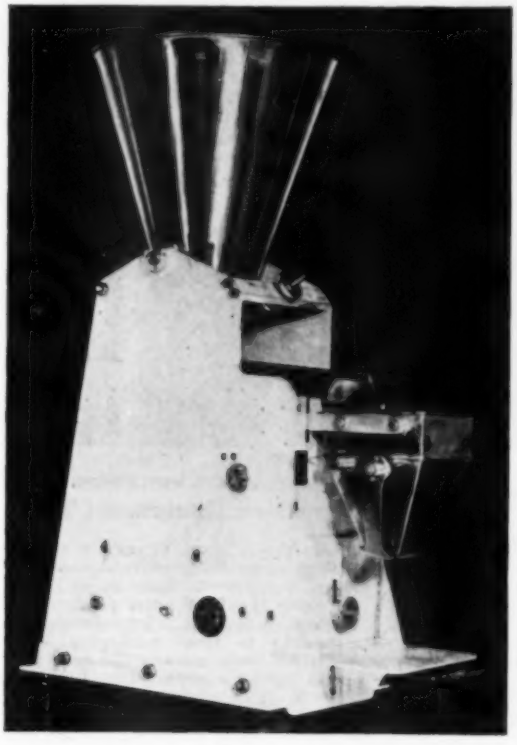
The automatic tablet bottler developed by the U. S. Automatic Box Machinery Company Inc., Roslindale, Mass., is designed to handle a wide range of tablet and bottle sizes. Designated the Model TM, the new machine automatically counts a predetermined number of tablets into bottles quickly and accurately.

The machine has been arranged so that it will handle bottles from 1" to 2¼" in diameter that are up to 5" in height. All the operator must do is to load empty bottles onto a segmented feeding table. From that point all operations are automatic. As the bottles reach the filling station tablets are fed from the hopper on top of the machine down individual chutes equipped with specially designed segmented wheels that accurately, rapidly and safely count the proper number of tablets into each bottle. Counts can be set in all quantities



from 12 to 300. The filled bottles are discharged onto a conveyor which transfers them to the next operation, production rates up to 120 filled bottles per minute are possible.

The new TM has been functionally designed to make changeover simple and fast. Accommodation of various bottle sizes is accomplished by a change of gears and adjusting to correct bottle size on the feeding table. Tablet counts are easily set by changing two conveniently located gears.



Filling and Weighing Machine

Glengarry Machine Works, Inc., Bay Shore, N. Y. has put out a net weight filling machine for dry products called the Thrifty Weigh, which is a combination of a vibratory feeder and a weight beam that can be used for a wide variety of products.

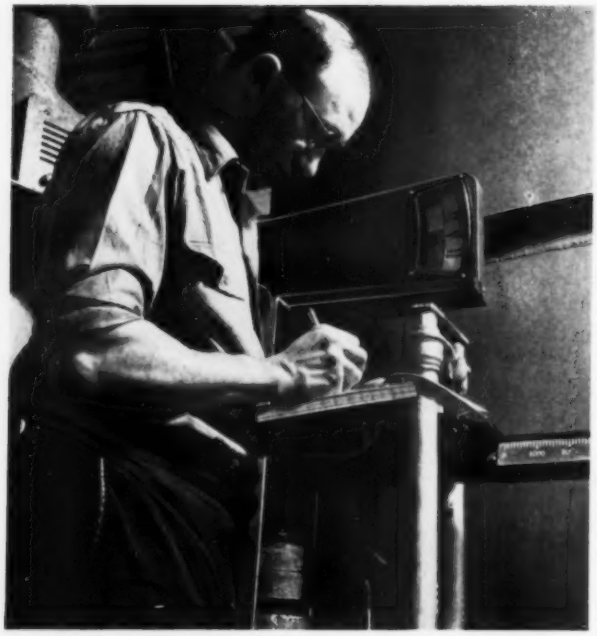
There are no sliding parts where gummy films can build up, the machine is easy to clean and operate. It is semi-automatic and will not empty its batch until the container is in place to receive it.

Quantities up to two and a half pounds can be weighed, and poured into containers ranging from one inch to ten inches high.

Hand Trucks

A line of hand trucks manufactured by The Ace Co., Ocala, Fla., is currently reaching the market featuring a "thrust absorber" principle. By this design, the thrust from the load is carried directly from the nose plate to the frame and not through a welded joint.

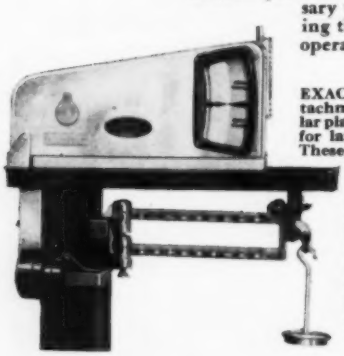
Model 23-10 made for the easy handling of crates, boxes, etc., for rough going over curbs, tracks and so on, is equipped with semi-pneumatic wheels and has a capacity of 750 pounds, is 51" high and weighs 40 pounds.



A heavy duty weighing operation in Vitamin A and B concentrate production. Courtesy of National Oil Products Co., Harrison, New Jersey.

Vitamin Concentrates Need Precision Equipment Too . . .

Production of good Vitamin A and D concentrates require good equipment . . . precision equipment. Your scales are of the precision type and enter production from beginning to end . . . from formulae compounding to final packaging. EXACT WEIGHT Scale users in the drug and cosmetic industry report better uniformity, more accurate packaging and time saving features over their former equipment. All of this of course makes for a better product . . . less overhead in production . . . more net profit. Naturally when equipment does this it pays for itself quickly . . . makes it expensive to be without it. If you have a production problem where weighing is necessary write us for details covering the unit best suited to the operation.



EXACT WEIGHT Indicating Attachment Model No. 4016 for regular platform scales. Ideal equipment for large compounding operations. These attachments substitute visible weight control for guesswork beam balancing, save in overweight, eliminate underweight, materially speed up your work. Actually this simple devise transforms an ordinary scale into a precision model at low cost. Users report savings in time and product from two to ten times the cost of the attachment. Fits any heavy duty scale regardless of capacity.

INDUSTRIAL PRECISION

Exact Weight Scales

THE EXACT WEIGHT SCALE COMPANY

950 West Fifth Avenue, Columbus 8, Ohio

Dept. AK, 783 Yonge St., Toronto 5, Canada

ALSOP FILTERS

compact, portable, completely sealed for

EASY HANDLING and POSITIVE OPERATION

Thousands of processing men depend on the convenience and general efficiency of "*Sealed-Disc*" Filters to protect their products against foreign impurities in each and every batch.

All standard units (capacities from 1 g.p.m. to thousands of g.p.h.) are compact, portable and completely sealed against leakage or even evaporation. They are easy to operate and maintain and provide long, efficient and reliable service in your most vital production processes.

For complete data on "*Sealed-Disc*" Filters and assistance in solving your filtration problems—write us today.

ALSOP

ENGINEERING CORPORATION

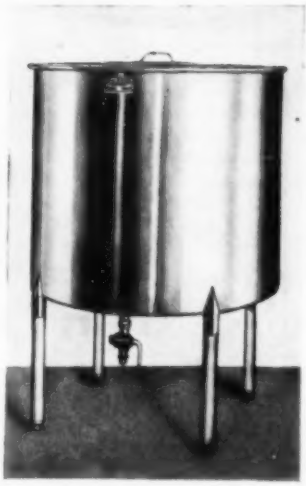
Filters · Filter Discs & Sheets · Mixers · Agitators

205 Cass Street Milldale, Connecticut

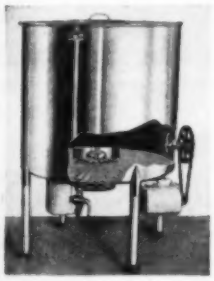
Filpaco
(FORMERLY FILCO)

STAINLESS STEEL
Storage TANKS

Available for Immediate Delivery!



- Sizes: 30 gal. to 500 gal. capacities.
- One piece stainless steel lift-off covers.
- Adjustable legs for leveling tanks on uneven floors.
- Fabricated of 18-8 stainless steel.
- Channeled dished bottom for complete drainage.
- Acid-resisting.
- Easy to clean.
- Orders filled without delay.



Stainless Steel
Mixing TANKS

- Standard models or fabricated to your specifications.
- Side or bottom agitators or a combination of both with efficient pulley drives.
- Agitators and baffles designed to maintain thorough agitation.

FILTER PAPERS

- ★ANALYTICAL PAPERS
- ★QUALITATIVE PAPERS
- ★INDUSTRIAL PAPERS
- Manufactured under rigid specifications for accuracy and dependability.
- Cut to any size and shape.
- Large inventory maintained for prompt service.
- Write for samples advise sizes.

• • •

Other "Filpaco" Products: Filter Presses, Disc Filters, Syphon Fillers, Portable Agitators, Fittings, Tygon Tubing, Conveyors, Filter Cloths and Bags, Asbestos Pads, Filter Aids.

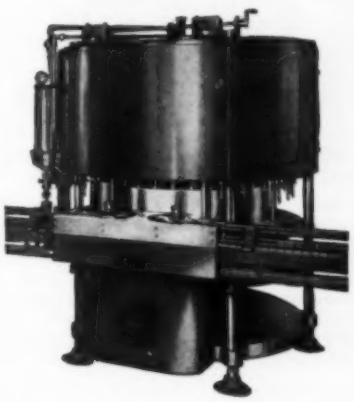
The FILTER PAPER Co.

2428 S. Michigan Ave., Chicago 16, Ill.

U. S. ROTARY VACUUM FILLERS

Fully Automatic

for **HANDLING LIQUIDS** and **SEMI-LIQUIDS**



- In a complete line of machine sizes
- Capacities up to 250 per minute
- Handle any size container up to and including gallons

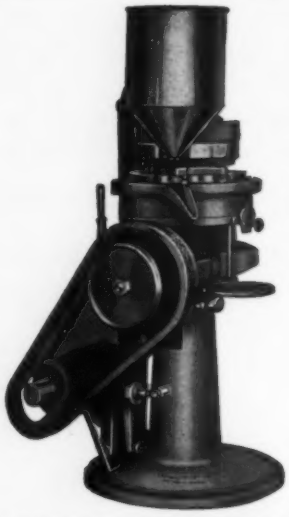
Each machine in this line represents the finest in filling equipment construction and time-tested engineering for highest filling efficiency.

U. S. Rotary Vacuum Fillers with post-war advancements are illustrated and described in newly prepared literature. Write for "Rotary Filler Details."

OTHER U. S. FILLING UNITS: The popular new Semi-Automatic Model B-2 Vacuum Filler with interchangeable filling stems for handling AGST and ordinary neck opening containers up to 4" diameter. A rapid filler of any type liquid. Invaluable to small plants; an essential "stand-by" for large plants. Portable. Simply plug it in for rapid filling anywhere. Write for Bulletin.

U. S. BOTTLERS
Machinery Co.
4011 N. ROCKWELL ST. CHICAGO

MANUFACTURERS OF
PUMPS
CAPPERS
FILTERS
CONVEYORS
WASHERS & DRYERS
WASHERS
CORKERS
FILLERS



A NEW COLTON ROTARY TABLET PRESS
SERIES 200-25 ROTARY TABLET PRESS

The design of the Series 200-25 Tablet Machine is an outstanding engineering achievement, the culmination of years of experience in building tablet machines. This compact machine incorporates refinements that provide an entirely new standard of performance for this type of equipment.

ARTHUR COLTON COMPANY
2620 East Jefferson Established 1884 **Detroit, 7, Mich.**

IMMEDIATE DELIVERY

POTDEVIN
6" LABEL PASTERS

POTDEVIN MACHINE CO.
EST. 1893
1257 38TH ST. BROOKLYN 18, N. Y.
POTDEVIN

Straight Line
Bottle Filling Machine
for **Gravity-Vacuum-Pressure**
One Machine—For 3 Uses

No Dripping—Negligible Overflow—High Speed

Universal Automatic Filling Valves
Fills all types of solutions: free flowing—heavy—foaming
Instant filling of liquid into bottles.
Exact adjustment to desired height in bottle.
All bottles filled uniformly
For all size bottles.
Made to meet your requirements.
2-10 Spouts

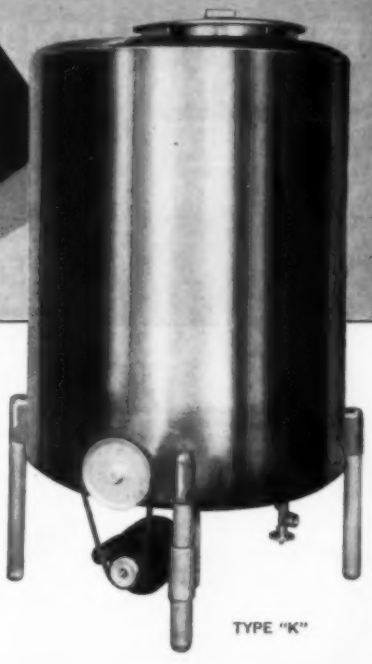
Inquire about our
Alco-Air Bottle Cleaning Units
Collapsible Tube Closing Machines
Jar and Tube Filling Machines
Automatic Filling Valves
Bottle Emptying and Cleaning Units

Perl-Oussani Machine Mfg. Co.
68 JAY STREET, BROOKLYN 1, N. Y., MAin 4-0165

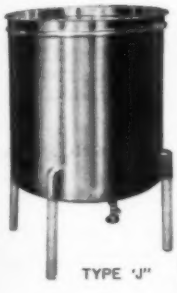
BY packeting dry free flowing materials — drugs, powders, pills, granules, and crystals — Brown Automatic Packet Filling Equipment has opened new markets and developed profitable sales volume for a host of manufacturers in the drug field. Brown Bag machines fill packets quickly, economically and uniformly, and keep down filling losses. Ask for details of this sales-stimulating method of merchandising your product.

BROWN BAG FILLING MACHINE CO., INC.
FITCHBURG, MASSACHUSETTS
West Coast Reps.,
Peter D. Bowley & Assoc., 369 Fifth St., San Francisco, Cal.

Your MIXING or STORAGE PROBLEMS can be Solved with a STAINLESS STEEL SAN-I-TANK



Regardless of what your chemical storage or mixing problem is, a San-I-Tank can simplify it for you—economically and safely. All San-I-Tanks are built by tank specialists. Constructed throughout of 18-8 Stainless with all welds ground smooth and polished. Completely self-draining, sanitary and rust proof. Many extras available such as covers, motors, agitators, etc. Let your engineers give you recommendations on your tank problems.



TYPE "J"

MANY TANKS IN STOCK FOR IMMEDIATE SHIPMENT — *Tell Us Your Requirements.*

We carry a complete line of stock sizes in San-I-Tanks. If we do not have a Standard tank to fill your need our Engineering staff is at your disposal to design and build a tank best suited to your requirements. If it's a tank problem, get in touch with Metal-Glass today,—we can solve it for you.

TYPE "K"

METAL-GLASS PRODUCTS CO.

Dept. D BELDING, MICHIGAN

HORM FILTERS

HORM ASBESTOS FILTER PADS

Horm Filters for filtration, clarification polishing, are designed so that no liquid can by-pass the filter element. They are unsurpassed for drug, chemical and cosmetic preparations.

CLARIFLOW

- No rubber washers used
- Adaptable to all types of filter mediums
- Rapid change of filter pads
- Construction Stainless Steel or Bronze (nickel plated)
- Suitable for coarse and fine filtration, including germproof and ultra-fine

HORM ASBESTOS FILTER PADS FOR EFFECTIVE FILTRATION

STERILFLO

TRADE MARKS REG. U.S. PAT. OFF.

F. R. HORMANN & CO., Inc.

186 JORALEMAN ST., BROOKLYN 2, NEW YORK
Plant: 30 Sea Cliff Ave., Glen Cove, L. I.

NEW EQUIPMENT

for Immediate Delivery

VACUUM FILLERS—8-10-12-SPOUTS
WILL FILL FROM 1 OUNCE TO 1 GALLON JARS OR BOTTLES — 45 to 60 PER MINUTE
STAINLESS STEEL SYPHON FILLERS
CHEM & PRO SLOW and HI-SPEED AGITATORS
CHEM & PRO POWDER MIXERS—up to 2000 lbs.
STAINLESS STEEL KETTLES up to 200 gallon
STAINLESS STEEL TANKS up to 500 gallon
CONVEYORS BUILT TO YOUR SPECIFICATIONS

Guaranteed Rebuilt Equipment

4—J. H. Day 100 & 200 lb. mixers and sifters.
1—Weeks back and front automatic labeler.
3—Fred Goat and Kramer semi-automatic cappers.
1—25 gal. copper still with pump and column.
3—Pony mixers—8 gallon to 20 gallon.
2—Rotex sifters 20" x 48" and 20" x 84".
1—Late type Ayres tablet counting machine.

WHAT HAVE YOU FOR SALE?

Chemical & Process Machinery Corp.

146 GRAND ST. WOrth 4-8130 NEW YORK 13, N. Y.

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR

1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

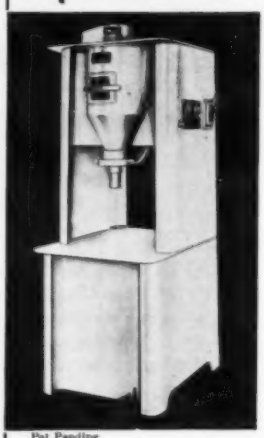
Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

EPPENBACH, INC.
45-10 Vernon Blvd., Long Island City 1, N. Y.

EPPENBACH INC.
Processing Equipment for Over 30 Years

THE *RODGERS* FILLER IS *Dependable -- Versatile -- Fast*



Pat. Pending

Designed by Cragar

Now in successful operation in the drug and cosmetic industries. These exclusive Rodgers features will increase your plant's efficiency:

- Simple dial adjustments to control transfer time and package fill time.
- Cams completely eliminated.
- Positive clutch makes no slippage possible, guarantees long life.
- All mechanisms above tube and auger.

Let us arrange a practical demonstration, using your product.

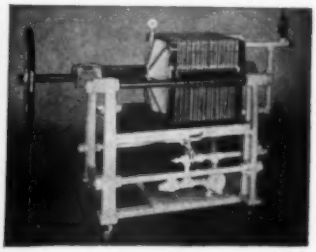
The Rodgers Co. Also Manufactures:

- POWDER FILLERS
- PACKAGE FILLERS
- CARTON SEALERS
- TUBE AND JAR FILLERS
- TUBE CLOSERS
- TUBE CLIPS
- STAINLESS STEEL KETTLES
- STAINLESS STEEL TANKS
- PUMPS
- CONVEYORS
- PORTABLE ELECTRIC MIXERS
- BATCH MIXERS

SEND FOR COMPLETE DETAILS

GEORGE G. RODGERS CO., INC.
225 West 34th Street New York 1, New York
BRyant 9-2040

The ERTEL **UTILITY FILTER**



COARSE PREFILTRATION TO GERMPROOF USES ANY TYPE OF FILTERING MEDIUM

This unique filter is the only unit specially designed for use with any and all types of filtering mediums. Available in a number of sizes holding from 10 to 100 filtering surfaces. Ertel single hand wheel effects simple complete closure. Catalog 15 describes Ertel Liquid Handling equipment. Ask for your copy!

ERTEL LIQUID HANDLING EQUIPMENT

ERTEL ENGINEERING CORPORATION
KINGSTON NEW YORK

New York City Sales Office: 40 West 48th Street, New York 19, N. Y.

ASBESTOS FILTER SHEETS • ASBESTOS SHEET FILTERS
BOTTLE FILLERS • PORTABLE MIXERS • PLASTIC PUMPS

YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Trade-Mark Consultant

Notes on the Lanham Act

IN July of this year the new Trade-Mark Act goes into effect bringing into being many new and revolutionary provisions relating to all trade-marks both old and new, whether registered or not.

I shall give brief spot lights of the provisions, improvements and alterations of Trade-Mark practice solely with a view to providing a concise index thereof for those of you who would like to know something about this new Act but have not the effort to spare on wading through a legally phrased analysis.

In the comments given I shall omit all "provided that's" except those few imperative to an understanding of the subject, since we all know that exceptions are constantly to be met with in legal matters and each specific matter should be analyzed on its facts.

1. Trade-mark owners are given greater protection than ever known before *if* the owner registers the mark.

2. Registration becomes practically imperative if the trade-mark owners wishes to be in a position to prevent infringement of his rights.

3. Greater attention than ever before given must be directed to the endeavors of your competitors since any mark adopted by them which you think infringes on some established mark of your own, must be promptly challenged. The main reason for this is that after five years a registered trade-mark which is in actual use in commerce is normally *incontestable* on most grounds so that it is no longer possible to wait to some future date when he may sue you for infringement.

4. Registered trade-marks will have nationwide effect to prevent use by another of that mark except a legitimate prior user in the particular locality of use. In other words, those cases of the small drugstore in Ichiwalla, way out there, who has had desultory use locally of the now nationally advertised and used trade-mark of the big company no longer will result in a hold-up of the big company as so often has happened. If the said drug store owner has not registered the mark at the Patent Office, and by that omission has foregone his own nationwide coverage, then the owner of that same mark when registered will have full rights in all parts of the nation except the locality in which the prior use occurred, such territory being still presumably controlled by the drugstore owner.

5. It is more than ever desirable to indicate that your trade-mark is registered. Naturally, this has been avoided in many cases because of aesthetic values, but the new Act even takes care of this. Marking may be indicated by a capital R in a circle similar to the C of copyright material, so that even a fancy cosmetic label need not be spoiled. There is no need to wait until July on this point of course. Any new labels, boxes or like matter at present in production can be marked as stated to indicate the trade-mark used is registered. There is no need for the year of registration being mentioned or in fact anything beyond the R in a circle given above.

6. Several new forms of marks are considered now to be registrable including service and certification marks.

7. The mark need no longer be affixed to either the goods themselves or the package containing same, which now obsolete provision has been the stumbling block of many an otherwise good trade-mark.

8. A wide interpretation of the Act seems to indicate that under some conditions slogans, phrases, title and designations may be legitimately registered as trade-marks which may be of great help to us in the drug, cosmetic, and allied industries, since there is so often need for protection, heretofore not obtainable, of such identifying matter as slogans and titles. Presumably it will also be possible to register as a trade-mark a distinguishing guise or get-up of a cosmetic container as long as it is distinctive.

Because of the Above Points, I recommend that you immediately put in hand a survey of your trade-marks situation. This should include listings of all your registered trade-marks; your unregistered but used trade-marks; any previous mark you liked very much but abandoned since it was then not registrable for any specified reason; any slogan, phrases, titles or like matter which you feel is distinctive and really worth of protection; any wording which you use on letterheads or elsewhere which might be construed as a good "service" mark, a perfect example of which would be your laboratory department which had used a sign, slogan or like indicator of origin; and finally any design feature for any of the above. This survey will take sometime but will be worth the effort since you will then be ready to turn same over to your trade-mark counsel in good time before July 7 next. There will be a tremendous rush of course after that date, since besides the new filings, your present marks will have to be either republished or refiled, for reasons I will give later. So it is well to be prepared ahead to make sure you do not lose something valuable to an earlier starter.

Faster Filling

OF BOTTLES, JARS, TUBES AND CANS

Use this Anderson Filler, Model C-2, for liquids, semi-liquids, creams, pastes and greases. Dispensing capacity up to one pint per stroke. Fills practically all types of containers . . . jars, bottles, cans or tubes. The machine is fast, easy to operate, sanitary and easy to clean. Write for prices and full details.

Ask for Bulletin No. 5-24

ANDERSON BROS. MFG. CO.
ROCKFORD, ILLINOIS

Anderson Fillers

HANDLES PASTES, CREAMS, LIQUIDS AND SEMI-LIQUIDS

ANNOUNCEMENT

Design, Construction and the Complete Equipping of Laboratories, Biological, Chemical, Cosmetic, Drug and Food Plants.

WIGTON-ABBOTT CORPORATION
PLAINFIELD, NEW JERSEY
Telephone: Plainfield 6-7200, 6-8100
Founded 1924

A List of Nationally-known REPEAT Clients will be mailed you on request

---

TOP-QUALITY COCOANUT OIL AND CASTILE

Shampoos

NOW AVAILABLE IN QUANTITY

- MADE WITHOUT CAUSTICS
- PERFECTLY NEUTRAL (ph 7)
- UNUSUALLY CLEAR AND THICK
- EXCEPTIONAL LATHER
- NO HAZING OR SEDIMENT

— AT COMPETITIVE PRICES —

If you are looking for a quality shampoo of exceptional merit, write for details and samples.

SAVON PRODUCTS COMPANY
Manufacturing Chemists
203 East 12th St., New York 3, N. Y.

Here's what you'll like about the new

..."HAGERTY HANDY FILLER"

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

Write for illustrated folder and prices

HAGERTY BROS. & CO.
10 Platt Street **New York, N. Y.**
Est. 1849

The Trade-Marks listed here are dated January 7, 1947 through January 28, 1947 inclusive.

SEA SPICE—VI—BC—501,575
Irresistible, Inc., New York, N. Y.
Ser. May 7, 1946 D. U. Apr. 8, 1946

SCHIAPARELLI RADIANCE—VI—ABC—492,274
Parfums Schiaparelli, Inc., New York, N. Y.
Ser. Nov. 27, 1945 D. U. Aug. 1943

SILVER WHITE—VI—HC—489,741
John B. Knight, Sr., (Old 97 Distributing Co.) Tampa, Florida
Ser. Oct. 10, 1945 D. U. Jan. 1938
Reg. 427,042 Jan. 21, 1947

SKY GARDEN—VI—B—501,330
Lauren Limited, Toronto, Canada
Ser. May 2, 1946 D. U. Aug. 27, 1945

SPRINK—IV—M—492,399
Rygene Prod. Inc., New York, N. Y.
Ser. Nov. 29, 1945 D. U. Nov. 15, 1945

STARLET—VI—C—501,471
Parfait, Inc., Chicago, Ill.
Ser. May 4, 1946 D. U. Mar. 17, 1942

SULTRA (With des)—VI—S—512,347
Schering Corp., Bloomfield, N. J.
Ser. Nov. 9, 1946 D. U. April 8, 1946

SWEET BLACK—VI—H—492,060
John B. Knight, Sr. (Old 97 Distributing Co.) Tampa, Fla.
Ser. Nov. 23, 1945 D. U. Mar. 11, 1945
Reg. 427,046 Jan. 21, 1947

SWEET CONFUSION—VI—BCD—501,054
Farel Destin, Inc., New York, N. Y.
Ser. Apr. 27, 1946 D. U. Apr. 5, 1946

TERPSICHORE—VI—C—503,916
Lehn & Fink Prod. Corp., Bloomfield, N. J.
Ser. June 14, 1946 D. U. May 15, 1946

TONI—VI—G—494,142
Noma Inc., St. Paul, Minn.
Ser. Dec. 29, 1945 D. U. Aug. 1, 1944

TYKOR—VI—T—511,771
Tykor Prod. Inc., New York, N. Y.
Ser. Oct. 30, 1946 D. U. Apr. 17, 1946

VINTNER RED—VI—C—501,461
Lehn & Fink Prod. Co., Bloomfield, N. J.
Ser. May 4, 1946 D. U. Mar. 28, 1946

WOLF CALL (With des)—VI—B—500,656
Henchman of Hollywood, Los Angeles, Calif.
Ser. Apr. 22, 1946 D. U. Apr. 4, 1946

WRISLEY—VI—ABC—496,749
Allen B. Wrisley Co., Chicago, Ill.
Ser. Feb. 16, 1946 D. U. Apr. 1934

YOUTH BLOOM—VI—C—488,685
Vivienne Berman (Kennard Co.) New York, N. Y.
Ser. Sept. 19, 1945 D. U. June 15, 1945

4 in 1 (With des)—IV—A—498,906
Kent Chem. Co., Grand Rapids, Mich.
Ser. Mar. 25, 1946 D. U. Feb. 1, 1946

The Trade-Marks listed here are dated February 4, 1947 through March 4, 1947 inclusive.

ADBAC—VI—M—501,195
Onyx Oil & Chem. Co., Jersey City, N. J.
Ser. Apr. 30, 1946 D.U. Jan. 15, 1946

ALAIR—VI—H—502,387
The Mennen Co., Newark, N. J.
Ser. May 18, 1946 D.U. Apr. 3, 1945

ALUAC—VI—M—492,609
Seymour Winston (Winston Prod. Co.), New York, N. Y.
Ser. Dec. 3, 1945 D.U. May 1, 1944

AMBA-AURA—VI—B—501,120
Kay Daumit, Inc., Chicago, Ill.
Ser. Apr. 29, 1946 D.U. Mar. 1, 1946

APPLAUSE—VI—B—503,696
Avon Prod. Inc., New York, N. Y.
Ser. June 12, 1946 D.U. Feb. 20, 1946

ATTAR OF PETALS—IV—A—502,729
Jean Vivaudou Co., Inc., New York, N. Y.
Ser. May 24, 1946 D.U. Dec. 1941

B B C—IV—M—499,537
The Brunswick-Balke-Collender Co., Chicago, Ill.
Ser. Apr. 3, 1946 D.U. Oct. 4, 1945

BEE BRAND—VI—T—501,996
McCormick & Co., Inc., Baltimore, Md.
Ser. May 14, 1946 D.U. Apr. 1, 1946

BLANC DE CHINE—VI—ABC—496,739
Reta Terrell, Chicago, Ill.
Ser. Feb. 16, 1946 D.U. Oct. 1943
Reg. 428,241 Mar. 11, 1947

BOON—IV—M—501,825
Clorox Chem. Co., Oakland, Calif.
Ser. May 10, 1946 D.U. Apr. 23, 1946

BREATH OF THE WOODS—VI—ABI—498,809
David L. Stockbridge, (Susan Alameda), Melrose, Mass.
Ser. Mar. 22, 1946 D.U. Feb. 19, 1946

BRIGAND—VI—B—506,780
Soci. d'Etudes et d'Exp. de la Parfum de Luxe, Paris, France
Ser. Aug. 2, 1946 D.U. May 10, 1946

BRITT—VI—I—500,592
Weyermann & Co., Zurich, Switzerland
Ser. Apr. 19, 1946 D.U. Nov. 1939
Reg. 428,243 Mar. 11, 1947

CAL-C-NATE—VI—T—499,692
Charles R. Parsons (Parsons Chem. Works) Grand Ledge, Mich.
Ser. Oct. 29, 1945 D.U. Feb. 1, 1945

CALGLO—IV—M—501,899
Calgon, Inc., Pittsburgh, Pa.
Ser. May 11, 1946 D.U. Jan. 3, 1945

CALIFORNIA SUN—VI—C—501,732
Golden Arrow Toiletries, New York, N. Y.
Ser. May 9, 1946 D.U. Apr. 2, 1945

CASUAL—VI—AC—514,143
Sportline, Inc., New York, N. Y.
Ser. Dec. 12, 1946 D.U. Oct. 16, 1945

CERBALATE—VI—T—498,740
Westbury Chem. Co., Inc., New York, N. Y.
Ser. Mar. 21, 1946 D.U. July 5, 1946

CHARM-KURL SUPREME—VI—G—486,760
Frazer Hair Fashions, St. Paul, Minn.
Ser. Aug. 6, 1945 D.U. Jan. 17, 1945

CLE PRODUCTS (And Des.) IV—M—497,618
Herbert H. McJunkin (Cle Prod.) Dallas, Tex.
Ser. Mar. 4, 1946 D.U. July 28, 1943

CLOUD MIST—VI—ABCDEGH—501,431
Assoc. Prod. Inc., Chicago, Ill.
Ser. May 4, 1946 D.U. May 25, 1943

COOL STEP—VI—F—475,203
Galen Lab., Pittsburgh, Pa.
Ser. Oct. 11, 1944 D.U. Sept. 25, 1944

CORN-O-CIDE (And Des.)—IV—A—493,914
Brown-Vaughan Phar. Co., San Francisco, Calif.
Ser. Dec. 27, 1945 D.U. Mar. 1928

CRADLE SONG—VI—L—505,033
Avon Prod. Inc., New York, N. Y.
Ser. July 3, 1946 D.U. Apr. 1, 1946

CREME ESTRAUTA—VI—C—474,893
Max Friedman (Jane Carol Cos.) Rockaway, N. Y.
Ser. Oct. 4, 1944 D.U. Aug. 23, 1944

CYNIQUE—VI—BC—504,114
Raphael Lopez (Maison Raphael) Paris, France
Ser. June 18, 1946 D.U. Nov. 24, 1944

(To be continued)

LANOLIN HAND LOTION: Can you furnish us with a formula for a hand lotion containing lanolin, which will not be too sticky? Marengo

Probably something made along the following lines will serve your purpose:

White powdered soap	**1.0**
Lanolin anhydrous	**10.0**
Borax	**0.5**
Water	**88.0**
Perfume	**0.5**

Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

Patents and Prices

I suppose that one of the things everybody is always aware of is prices. The farmer, the manufacturer, the fabricator, the processor, the wholesaler, the distributor, the retailer, and last but not least, the consumer are all price conscious. Today, this consciousness is particularly apparent, with the result that the radio, the newspapers, and the other organs of news dissemination are giving considerable prominence to the subject.

Thus, we now read about the ideas of the President of the United States, the president of R. H. Macy, and the good people of Newburyport, Mass. They all, in common with many others, seem to think that prices are too high and something should be done about lowering them. Capital says labor and government are the causes of high prices. Government says that capital and labor ought to get together. Labor says capital is the culprit.

Surprisingly, no one has blamed the patent system for all our price troubles. Just think about all the publicity some bright boy missed!

Since the question of the relationship of patents and prices has been raised, perhaps it would be interesting to try to find out what, if any, the relationship actually is. Instead of following procedure which in some circles is considered orthodox, we shall reverse it and instead of starting with the answer and then trying to find facts to fit it, we shall examine the problem and deduce the answer after examining the facts.

We could start by singling out carefully-selected cases which would seemingly show that as soon as a patent on a device or material runs out (17 years after issuance) the price of the device or material drops. You could, if your mind works that way, then conclude that patents keep prices up.

The question is whether that is the proper way to attack the problem or whether there is a sounder way. Perhaps it would bring us a lot nearer the truth if we consider whole industries and classify them into what we may call (1) patent-conscious and (2) non-patent conscious groups. (Because this treatment is intended as a serious one the second group has not been labeled the patent-unconscious group.) Then, by looking over the price structures of the industries over a sufficiently-long period of time so that trends, if any, could be detected, we might acquire some valuable information.

If we proceed as just indicated, we might take as random examples of the first or patent-conscious group: the oil, drug, chemical, automotive, telephone, and radio industries. The second or non-patent-conscious group would, it seems to me, include the cosmetic, food, textile, and building industries.

Perhaps some would quarrel with this classification of the cosmetic industry. In reply, it can be said that while the cosmetic industry is patent-conscious to the extent that it is perfectly willing to utilize new developments, nevertheless it seems to me that on the whole the cosmetic industry is not patent-conscious when it comes to resorting to patents for protection.

When the patents-price question is viewed in the foregoing light, it is believed that there can be little doubt of the validity of the following conclusion: *patents help to keep prices down!* For, the price history of the patent-concious group (which as we have seen includes the drug industry) shows a downward trend; whereas, the same cannot be said about the non-patent-conscious group, which includes the cosmetic industry. Perhaps it would be interesting to examine in a future article some of the factors which bring about this condition.

In closing, I would like to raise a question which might deserve a little reflection. Today, when the well-advertised recession seems indeed to be closing in on us and, consequently, there is strong evidence of considerable competition for the consumer's dollar, which of the industries served by this publication is in a more advantageous position to meet current price problems and thereby reach what it considers to be its share of the consumer's dollar, the patent-conscious drug or the non-patent conscious cosmetic indusry?

Ambrettolide-Like Odors

Collaud, a Swiss Chemist, won a patent (U.S. 2,417,151, assigned to Givaudan-Delawanna, Inc.) for preparing new compounds said to have an ambrettolide-like scent. By heating esters of hydroxycarboxylic acids having the general formula HO·R·CO·OR′, wherein R is a branched or unbranched chain having more than 5 carbon atoms and at least one double bond, large-ringed lactones are obtained directly.

Previously, this same investigator had obtained U.S. 2,234,551 covering similar saturated lactones.

Anti-Spasmodics

Martin and Margot, two more Swiss chemists, were awarded U.S. 2,417,208 (assigned to Geigy) on their finding that, contrary to expectations, basic esters of the mono-alkyl isobutylacetic acids are excellent antispasmodics.

The patentees point out that earlier work of Fromherz had indicated that basic esters of aliphatic carboxylic acjds do not possess such properties. Furthermore, it is noted by Martin and Margot, that esters of this group previously known in the patent literature, such as the isovaleric acid ester, alpha-bromo-isovaleric acid ester, isopropylallyl acetic acid ester or diethyl acetic acid ester of 3-diethylamino-2: 2-dimethyl-1-propanol show a very slight neurotropic-atropine-like behavior.

Geigy was assigned another patent (U.S. 2,417,773) relating to antispasmodics. This patent deals with basic esters of aralkyl alcohols which are substituted in the alpha-position by at least one hydrocarbon radical.

Essential Oils To Vitamins

Another example of the tie-in between these two fields is given by the work of Smith and Rouault culminating in U. S. 2,417,220 (assigned to Regents of U. of Minnesota). These workers start with citral, geraniol, citronellal or citronellol and wind up with 2, 6-di-

Jasmin Blossom "V"

BY ALBERT VERLEY & COMPANY

reaches new heights of beauty and fidelity

. . . in reproducing the aroma of this indispensable flower

—TURN THE PAGE

Jasmin Blossom "V"

BY ALBERT VERLEY & COMPANY

—your protection against the continuing high cost of natural Jasmin

Fortunately for the perfumer in this critical situation, the synthesis of this essential flower has achieved a constantly closer simulation of the original. For many years, the development of Jasmin specialties and compositions has been a particular interest of the staff of Albert Verley & Company. The climax of all this research and creative effort is reached in Jasmin Blossom "V." It is literally impossible to distinguish Jasmin Blossom "V" from the natural product, so nearly has perfection been achieved.

Its moderate cost makes Jasmin Blossom "V" widely available as a substitute, in whole or in part, for the natural product — both in your Jasmin odors and for the Jasmin note which is so important in a wide variety of other perfume compositions.

Important perfumers have found that Jasmin Blossom "V" is more than a war-time expedient. They have adopted it as a permanent part of their principal formulas. When you have experimented with a working sample, you will understand why. Write for yours today.

FOREIGN REPRESENTATIVES

Máximo A. Kuderli
Rodríquez Peña 233
Buenos Aires, Argentina

Blemco S. A.
Caixa Postal 2222
Rio de Janeiro, Brasil

Carlos Bobbert
Casilla 9660
Santiago, Chile

Agencia de Papeles y Ferreterías Ltda.
Apartado Aéreo 4608
Bogotá, Colombia

Juan Gonzáles
Sitios 355
Habana Cuba

Sahdala & Co., C. por A.
P. O. Box #27
Santiago de los Caballeros
República Domínicana

H. G. Zevallos Menendes
Casilla 602
Guayaquil, Ecuador

Julio López Martínez
Apartado 229
Guatemala, C. A.

Alberto Farres
Apartado 7233
México, D. F., México

Manuel J. Riguero & Ciá. Ltda.
Managua, Nicaragua

La Química Suiza S. A.
Avenida Wilson 706
Lima, Perú

I. Oriol Escoda
Esq. Socarras
Caracas, Venezuela

Assem Beyhum
King Fouad Avenue
Beirut, Lebanon

Sapriel & Douek
16 Sheikh Hamza Street
Cairo, Egypt

I. Spitzglass & Sons
Queens Rd. & Norfolk Street
Woodstock
Cape Town, South Africa

Indian Chemical Works
Khurshed Building
Mahatma Gandhi Road
Karachi, India

Albert Verley AND COMPANY
Headquarters for Odor Appeal
D. A. BENNETT AND E. J. STROBL, SOLE OWNERS

CHICAGO, ILL. • NEW YORK, N. Y.
MEFFORD CHEMICAL CO., LOS ANGELES

Synthetic Aromatic Products and Organic Isolates • Synthetic Flower Oils and Aromatic Bases • Bouquets and Finished Compositions

methyl heptanoic acid or derivatives. These products are intermediates in the synthesis of tocopherol (vitamin E).

The patented process involves reducing the starting materials to the corresponding saturated primary alcohol, esterifying the alcohol with a higher fatty acid, pyrolizing the ester to the olefin, 3, 7-dimethyloctene-1, and oxidizing the olefin.

The process as applied to citronellol and geraniol is given in detail in the following example, taken from the patent.

"Citronellol was hydrogenated under pressure in the presence of a Raney nickel catalyst. Reduction started at 80-85°C. under an initial hydrogen pressure of about 2000 lbs. The temperature was raised, however, to 120-125°C. to insure completion of the reduction, and was held there until the absorption of hydrogen ceased. The yield was practically quantitative and the product, after removal of the catalyst, would not reduce permanganate. For the reduction of geraniol with its two double bonds, one of them allylic, the temperature was raised to 200°C. and a pressure of 2550 lbs. was used. The perhydrogeraniol produced by the reduction boiled at 98-99°C. under a pressure of 9 mm. and had an index of refraction $n_{D^{22}}$ 1.4422. Even under the drastic hydrogenation conditions employed for reducing geraniol, a yield of 90% was obtained.

"Perhydrogeraniol thus produced was dehydrated to the octene in accordance with the following steps. 242.3 g. (1.164 moles) of pulverized phosphorus pentachloride were added over a period of five minutes to 330.5 g. (1.164 moles) of melted stearic acid. Phosphorus oxychloride was removed from the mixture by distillation under 20 mm. pressure until the temperature reached 150°C. 158 g. (1.0 moles) of perhydrogeraniol were added over a period of five minutes to the warm residue of stearoyl chloride (350 g.). The reaction was completed by heating the mixture at 150°C. for ten minutes. The crude perhydrogeranyl stearate was pyrolized by distillation over a period of 2½ hours at 360°C. (temperature of the liquid) through a seven-inch column packed with glass helices and wrapped with asbestos cord. The distillate was washed with water, dried over calcium chloride and fractionated. 117.5 g. of 3,7-dimethyl-1-octene (84% yield) were obtained, the product having a boiling point of 152°C. at 740 mm. pressure.

"The octene so produced was then oxidized to 2,6-dimethyl-heptanoic acid as follows: 37 g. of powdered sodium bicarbonate were added to a solution of 165.5 g. of the above octene dissolved in 1.3 liters of acetone in an apparatus equipped with a Hershberg stirrer. The mixture was cooled to 7°C. and vigorously stirred while 700 g. of powdered potassium permanganate were added in portions over a four-hour period. The acetone was removed by distillation and the residue was diluted with 2 liters of water. Dilute sulfuric acid and about 400 g. of sodium bisulfite were added alternately until the solution became clear. The heptanoic acid was extracted by means of 500 cc. of ether, the ether was evaporated, and residue (200 cc.) was fractionated. 83.5 g. of the heptanoic acid (45% yield) having a boiling point of 115°C. at 3 mm. pressure were obtained.

"This amount of heptanoic acid (0.528 mole) was converted to the acyl chloride by action of 110 g. (0.528 mole) of phosphorus pentachloride. The phorsphorus oxychloride was removed by distillation at a pressure of 20 mm. from a water bath at 65°C. The crude acyl chloride weighed 93 g. (100% yield)."

Water-Soluble Solutions of Fat-Soluble Vitamins

Normally water-insoluble vitamins, e.g. A and D, are dissolved in water through the aid of solubilizing agents, the fatty acid esters of water-soluble polyhydric alcohols or derivatives modified by reaction with a plurality of alkylene oxide groups. Some of the preferred agents are the polyethylene oxide derivatives of sorbitan monolaurate, monopalmitate, monostearate and monooleate.

The patentees assert that their compositions exhibit the properties of true solutions, unlike prior art techniques which involve the formation of emulsions and dispersions.

Their patent is U. S. 2,417,299, assigned to U. S. Vitamin Corp.

Malaria Treatment

Two English inventors, Barber and Wragg, were issued U. S. 2,417,726, (assigned to May and Baker) on new plasmochin-like compounds useful in treating protozoan infections such as malaria. An advantage of the new compounds over plasmochin and homologs is that the former are materially less toxic. The new compounds are 1, 2, 3, 4-tetrahydro-6-alkoxy-8-(omega-dialkylamino-alkyl-amino) quinolines.

Anti-Hemorrhagic Compounds

Fieser has obtained another patent in this field and assigned it to Research Corporation. This patent is U. S. 2,417,919 and it deals with a new general process for the synthetic production of substituted 1, 4-naphthoquinones. The patent also discloses and claims some new chemical compounds, including 2-methyl-3-geranyl-1, 4-naphthoquinone and 2-methyl-3-farnesyl-1, 4-napththoquinone.

The essential step in the new process consists in the condensation of a substance such as 2-m ethyl-1, 4-naphthoquinone with a diene, a beta-unsaturated alcohol or a reactive alcohol of the type H_2CH_2OH. The condensation is brought about by the use of a strong organic acid such as oxalic or trichloroacetic acids in a solvent such as dioxane or ethylene glycol monomethyl ether and temperatures from 70°C. to 180°C., depending upon the reactivity of the diene or alcohol.

Fieser points out that 2-methyl-3-phytyl-1, 4-naphthoquinone corresponds closely in absorption spectrum and other physical properties as well as in composition, biological activity and color reactions, to the natural vitamin K isolated from alfalfa extracts.

Other Patents

U. S. 2,417,057—**(Dow Chemical)—Sulfonium compounds, such as n-butyl methyl beta-[beta-(2, 3, 4, 6-tetrachlorophenoxy)-ethoxy] ethyl sulfonium methosulfate. Germicides.**

U. S. 2,417,071—**(Colgate Palmolive Peet)—Water-insoluble metal salts of monocarboxylic acids (e.g., aluminum soaps) are made by maintaining the ionic constituents of the water-insoluble salts in the contacting solutions in substantially stoichio-metric proportions.**

U. S. 2,417,143—**(Merck) 1-Polyacyloxyalkylamino-2-amino-4, 5-dimethyl benzene. Halogenated barbituric acids are condensed with aromatic ortho diamines or substituted derivatives, to form alloxazine or isoalloxazine derivatives in good yields.**

U. S. 2,417,318—**(American Cyanamid)—Method of producing 4-hydroxy pyrimidines. Reaction of acetic ester, formic ester, and sodium alcholate is carried out in an atmosphere of carbon monoxide under pressure. Permits use of elevated temperatures.**

We Offer the Following From Stock

ALOES, Curacao and Cape
ALTHEA ROOT
ANISE SEED
BALSAM COPAIBA
BALSAM PERU
BALSAM TOLU
BELLADONNA Leaves and Root
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CARAWAY SEED
CELERY SEED
CHAMOMILE FLOWERS
CHAULMOOGRA OIL
CLOVES, Zanzibar
COCILLANA BARK
COLOCYNTH PULP
COLOMBO ROOT
CORIANDER OIL AND SEED
CUMIN SEED
DANDELION ROOT
DILL SEED, Indian
ERGOT OF RYE
FENNEL SEED, Indian
FOENUGREEK SEED
GENTIAN ROOT
GINGER, Jamaica, Calicut
GRAINS OF PARADISE
GUM ARABIC AMBER SORTS
GUM KARAYA
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES
KAMALA POWDER
LAUREL LEAVES
LAVENDER FLOWERS
LINDEN FLOWERS, with Leaves
MAHUANG, Chinese
MARJORAM LEAVES
NUX VOMICA
OAK MOSS
ORANGE OIL, Sweet
ORRIS ROOT
PEPPERMINT OIL
PIMENTO, Jamaica
POPPY SEED, Indian
PSYLLIUM SEED AND HUSKS
QUINCE SEED
RHUBARB ROOT
ROSEMARY LEAVES
ROSEMARY OIL
SAGE LEAVES
SARSAPARILLA ROOT
SAVORY
SENNA LEAVES AND PODS
SESAME SEED, Hulled and Natural
STRAMONIUM LEAVES
STROPHANTUS SEED
THYME LEAVES & OIL
UVA URSA LEAVES
VALERIAN ROOT

AMINOPHYLLINE
BARBITAL
EHPEDRINE SALTS
GUM CAMPHOR, Japanese and Domestic
ICHTHAMMOL, N.F.
VITAMIN PRODUCTS

• Other Imports Arriving Daily. • We Offer a Complete Line of Pharmaceutical Pills, Tablets, Liquids and Ointments.
• All Orders and Inquiries Given Immediate Attention.

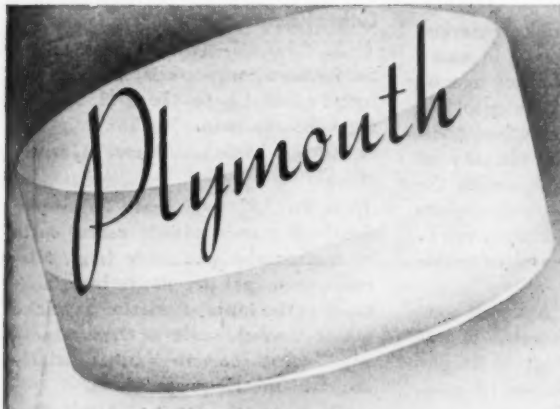
KACHURIN DRUG COMPANY

Manufacturers • *Importers* • *Exporters* • *Distributors*

DRUGS - CHEMICALS - OILS - BOTANICALS

525 West 43rd Street, New York, N. Y.

Telephones: BRyant 9-7100-1-2-3-4 • *Cable Address:* Kachurin, New York • *Codes:* A. B. C. 5th & 6th Edition and Bentley's



POWDER BASE NO. 7

Since the introduction of this new face powder material sales of it have constantly increased because the use of it actually represents a development in fine face powders.

Its exceptional silky, soft, smoothness, the complete absence of odor and the extremely fine particle size of it, plus its extraordinary adhesiveness actually improves a face powder in which it is used. As little as 5% added to your formula will bring about this result although it is being used in some face powder to the extent of 15% and a formula is offered showing its use in this percentage.

Samples are at your disposal and we believe that this is one of the Plymouth products which warrants a serious investigation by every face powder manufacturer because it has real merit and will improve your product.

A COMPLETE LINE OF COSMETIC RAW MATERIALS

PLYMOUTH BRAND NATURAL SOAPS

M. W. PARSONS

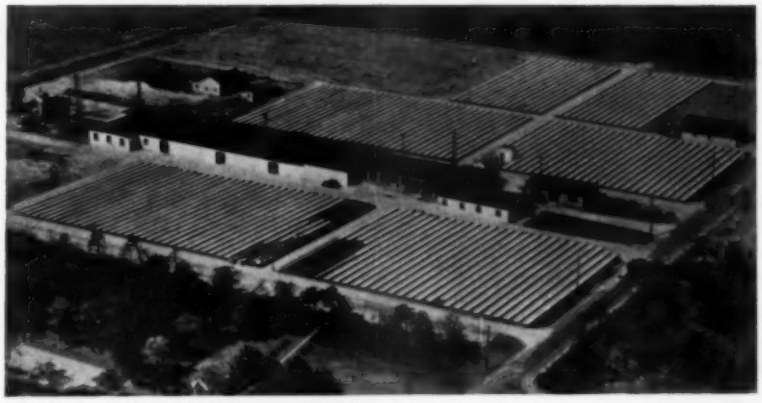
59 BEEKMAN STREET
NEW YORK, N. Y., U. S. A.

Imports AND
PLYMOUTH ORGANIC LABORATORIES, Inc.

TELEPHONE: BEEKMAN 3-3162 — 3163 — 3164
CABLE ADDRESS: PARSONOILS, NEW YORK

KOSTER KEUNEN ★ BEESWAX

U. S. P. Pure Sunbleached
S P. Pure Yellow Refined



Office and Refinery: Sayville, N. Y.

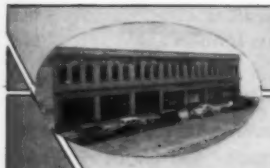
MICRO-CRYSTALLINE PETROLEUM WAXES

OZOKERITE • SPECIAL WAX BLENDS • CERESINE

Ask for samples, prices and technical data

KOSTER KEUNEN . . . . SAYVILLE, N. Y.

PHONE SAYVILLE 400



HUISKING

CHEMICALS

Pharmaceutical—Industrial

DRUGS, OILS, VITAMINS, etc.

Import & Export Merchants

Buying Agents For Leading Foreign Houses
Selling Agents For American Producers

SINCE 1910

CAMPHOR U.S.P. Du Pont, *Powder — Tablets*
MENTHOL CRYSTALS U.S.P.
HYOSCINE (Scopolamine) HYDROBROMIDE U.S.P.
ARECOLINE HYDROBROMIDE, N.F.
SULFA DRUGS
SULFUR PRECIP., U.S.P., *Sylvania Brand*
OIL CAMPHOR WHITE SYNTHETIC
LYCOPODIUM U.S.P.
FAPAIN
SPERMACETI U.S.P.
HAARLEM OIL
QUINCE SEED
IRRADIATED ERGOSTEROL
SPANISH SAFFRON
BEESWAX U.S.P. *yellow & bleached*
LANOLIN U.S.P. *Hydrous & Anhydrous*
PREPARED CALAMINE, N.F.
CHLOROPHYLL
COPPER SULFATE *Crystals or Powder*

CHAS. L. HUISKING & CO., INC.
155 VARICK STREET, NEW YORK 13, N. Y.
Chicago Office 661 E. Illinois St.
Cable Address HUISKING, NEW YORK
LONDON AGENTS
Wheway & Huisking, Ltd., 26 Great Tower St., London, E. C. 3, England

---

SINCE 1872

PEDER DEVOLD

PURE NORWEGIAN

COD LIVER OIL USP

"The Choice of Careful Bottlers Everywhere"

Standardized • Vitamin Tested • Oils of All Potencies

OUR CONTRACT CUSTOMERS ALWAYS HAD OIL

We succeeded, in the past, in providing our regular customers—contract or no—with their Cod Liver Oil needs. Our *Contract* customers were fully protected on oil and *price*. It always pays to have a reliable, experienced, and responsible source of supply.

VITAMINE BRAND OILS (Fortified Poultry Cod Live Oils)
DEVOLD VITAMIN A & D FEEDING OILS
VITAMIN A & D CONCENTRATES
IRRADIATED ERGOSTEROL (Vitamin D2)
CHLOROPHYLL
PURE WHEAT GERM OIL

IMPORT — EXPORT

PEDER DEVOLD OIL CO.
DIVISION OF CHAS. L. HUISKING & CO., INC.
155 Varick St. • New York 13, N. Y.
Cable Address: VITAMINE, New York — All Standard Codes

P.D.

SANTONIN

MEETING REQUIREMENTS OF INTERNATIONAL PHARMACOPOEIAS

ALKALOIDS of AMERICAN MANUFACTURE

SANTONINE COMPANY OF AMERICA
DIVISION OF CHAS L HUISKING & CO., INC
155 VARICK STREET, NEW YORK 13, N. Y. — Cable Address SANTONICUS, N. Y.

Compounder's Corner

Liquid Chest Rub

A liquid chest rub, using mineral oil as the vehicle, is given in the *N.A.R.D. Journal* (69:63, 1947) as follows:

Menthol	2.0	per cent
Camphor	2.0	" "
Rectified oil of turpen.	3.0	" "
Oil of eucalyptus	1.0	" "
Oil of cedarleaf	1.0	" "
Thymol	1.0	" "
Oil of nutmeg	0.5	" "
Mineral oil to make	100.0	" "

Triturate the menthol, camphor and thymol in a glass mortar until liquefied. Add the oils and the sufficient mineral oil to make the required volume. If necessary, filter until clear.

Hair Creams

Formulas for two hair creams are presented in The Chemist and Druggist *(147; 132, 1947). The first calls for the use of:*

Glyceryl monstearate, self-emulsifying	10.0
Neutral hydrocarbon oil	20.0
Beeswax	3.0
Castor oil	5.0
Water	50.0
Preservative and perfume sufficient	

The second formula for making a hair cream is as follows;

Triethanolamine	1.25
Stearic acid	6.00
Spermaceti	3.00
Mineral oil	25.00
Distilled water	65.00
Perfume	sufficient

Dissolve the triethanolamine, stearic acid and spermaceti in the mineral oil on a water bath. While still warm, run in the water previously warmed; stir vigorously until quite homogeneous and cool. Finally work in the perfume, taking care not to occlude air.

Data on Sunburn Ointments

The formulas for two wartime-developed sunburn ointments which coat the skin with a light non-greasy, non-sticky film resistant to water, perspiration and abrasion are contained in two reports for sale by the Office of Technical Services, Department of Commerce. The reports, prepared by A. C. Giese and J. M. Wells, contain the results of clinical investigations on sunburn preventives conducted for the armed services by the Committee on Medical Research, Office of Scientific Research and Development.

The search for a better sunburn preventive was essentially a search for an efficient sunscreen base, the first report states. The requirements called for the use of readily obtainable non-toxic, non-irritating ingredients, easy to apply and remove, and with rapid drying power and resistance to mechanical rubbing, water and perspiration. Of the many preparations compounded, two stearate base ointments, one a vanishing cream, rated highest in protection and comfort. By comparison with two commercial ointments, they were found superior in resistance to water and perspiration. Although the formulas for the two ointments vary considerably, both contain homomenthyl salicylate and p-aminobenzoate, the most efficient sunscreen bases tested, magnesium oxide for reflecting light, magnesium stearate and butyl stearate to give a dry adhesive film with good water repellency, and a pigment base to match the skin. The straight stearate base ointment gave as good results as the stearate ointment containing 30 per cent vanishing cream, the second report states.

Orders for the reports PB-40465 (*Sunburn Protection*; microfilm, $1; photostat, $1; 8 pages); and PB-40466 (*Sunburn Protection*; microfilm, $1; photostat, $1; 6 pages) should be addressed to the Office of Technical Services, Department of Commerce, Washington 25, D. C., and should be accompanied by check or money order, payable to the Treasurer of the United States.

Manicure Preparations

A survey of manicure preparations, presented by F. Winter in Soap, Perfumery and Cosmetics *(20:42, 1947) provides a number of illustrative formulas. For example, preparations to maintain the natural suppleness of the nails and to prevent their fracture make use of glycerine, fatty oils and fatty creams. A simple solution for this purpose consists of:*

Glycerine	50.0
Rose Water	50.0
Borax	2.0

A fatty preparation calls for the use of:

Anhydrous lanolin	40.0
Petroleum jelly	40.0
Beeswax	20.0

A more elaborate fatty cream is made from:

Cocoa butter	10.0
Cetyl alcohol	5.0
Beeswax	10.0
Anhydrous lanolin	5.0
Petroleum jelly	50.0
Liquid styrax	5.0
Peru balsam	2.0
Benzoin tincture	8.0

A preparation intended for soft pencils or crayon type sticks consists of:

Beeswax	20.0
White ceresin	40.0
Liquid paraffin	30.0
Anhydrous lanolin	10.0

Softening preparations are intended primarily for the treatment of hard and brittle nails. In most cases, one of the preceding formulas will be found effective, but often fatty emulsions, such as the following, are preferable:

1.	**Almond oil**	30.0
	Concentrated ammonia (0.92)	3.0
	Neutral soap powder	2.0
	Water	25.0

Dissolve the soap in the water, add the oil and emulsify with the ammonia.

2.	**Glycerine**	50.0
	Neutral potash soap	5.0
	Triethanolamine	25.0
	Water	20.0
3.	**Triethanolamine**	25.0
	Olive oil	15.0
	Water	60.0

When employing nail hardening preparations, such as those given below, the nails are covered with the preparation by means of a brush and left to dry. In the morning the residue is removed with alcohol, followed by the application of a fatty oil or cream. Winter notes that the

THE BABY MARKET IS GROWING UP!

A lively baby market expanding by leaps and bounds is an open invitation to share in the baby boom. The Dreyer Perfume Stylist can help you select a group of delicate, wholesome scents suitable for infants or two-to-sixers, whether you are producing individual items or kiddy combinations of talcs, oils, soaps, ointments and creams.

SEND FOR CATALOG "B"

P. R. DREYER INC.

ESSENTIAL OILS • AROMATIC CHEMICALS
PERFUME COMPOUNDS • FLAVORS

119 WEST 19th STREET • NEW YORK 11, N. Y.

BOSTON . . HAROLD H. BLOOMFIELD
CHICAGO . . . WM. H. SCHUTTE CO.
CINCINNATI . WM. G. SCHMITHORST
DETROIT . . . . . L. H. CARLSON
LOS ANGELES . . ALBERT ALBEK, Inc.
PHILADELPHIA . . . . R. PELTZ CO.

THOMPSON-HAYWARD CHEMICAL CO.
KANSAS CITY
AND CITIES THROUGHOUT MIDDLEWEST
MEXICO . . . . . EMILIO PAGUAGA
PRINCIPAL CITIES IN SOUTH AMERICA

CHEMICAL KESSCO PRODUCTS SPECIALTIES

EMULSIFIERS

of Definite Specifications

GLYCERYL MONO STEARATE
PURE
AND
SELF-EMULSIFYING

KESSCO WAX A-21
FOR ANTI-PERSPIRANTS
DEODORANTS
OINTMENTS

PROPYLENE GLYCOL MONO STEARATE
PURE AND SELF-EMULSIFYING

new

POLYMERIZED GLYCOL
STEARATES
LAURATES
OLEATES
ETC.

for

PHARMACEUTICALS
TOILETRIES
COSMETICS
ETC.

KESSLER CHEMICAL CO., INC.

ESTABLISHED 1921

STATE ROAD and COTTMAN AVE. • PHILADELPHIA 35, PA.

addition of glycerine or oil prevents a too drastic hardening action.

1. Citric acid	4.0
Tincture of myrrh	4.0
Water	100.0
Cologne water	15.0
2. Citric acid	3.0
Glycerine	12.0
Water	18.0
3. Alum	6.0
Glycerine	20.0
Water	60.0
4. Alum	10.0
Boric acid	2.0
Water	100.0
Resinoid myrrh	15.0
Resinoid benzoin	5.0
Liquid styrax	5.0
Peru balsam	3.0
Castor oil	3.0
Alcohol	1000.0

As indicated by the following formulas, nail bleaches are fairly easy to prepare:

1. Urea peroxide	5.0
Water	10.0-15.0
2. Oxalic acid	0.3
Citric acid	12.0
Water	90.0
Alcohol	10.0
3. Oxalic acid	4.5
Phenylacetic acid	0.3
Water	300.0
Alcohol	30.0
4. Acid potassium oxalate	1.5
Water	90.0
Alcohol	10.0

Cuticle softeners, like those given below are applied by means of an orange stick and cotton wool:

1. Caustic potash	2.0
Alcohol	25.0
Water	75.0
2. Caustic potash	2.0
Glycerine	25.0
Water	75.0
3. Potassium carbonate	5.0
Glycerine	25.0
Water	75.0
4. Borax	10.0
Salicylic acid	7.0
Water	75.0
5. Triethanolamine	25.0
Glycerine	25.0
Potassium carbonate	5.0
Water	95.0
6. Trisodium phosphate	8.0
Glycerine	25.0
Water	100.0

Winter notes that after each application of cuticle softener, the nails should be washed with an acidulated lotion (e.g. lemon juice, vinegar, etc.), especially after the use of caustic preparations. Finally, the nails are covered with petroleum jelly or a lanolin type of cream.

Nail white, intended for whitening the rim of the nails and applied with a spatula, may be made by adding sufficient gum and water to the following to form a paste:

Zinc oxide	15.0
Titanium dioxide	25.0
Talc	15.0

Another nail white is made by using sufficient tragacanth mucilage with the following materials to form a paste:

Titanium dioxide	7.0
Petroleum jelly	7.0
Benzoin tincture	5.0
Talc	10.0
Calcium carbonate	25.0

A third nail white formula consists of:

Zinc oxide	8.0
Titanium dioxide	25.0
Talc	25.0
Cetyl alcohol	5.0
Anhydrous lanolin	5.0
Petroleum jelly	30.0
Liquid paraffin	35.0

Solutions for removing nicotine and tobacco tar stains from the nails are simple to prepare:

1. Sodium sulfite	25.0
Water	100.0
2. Citric acid	10.0
Glycerine	5.0
Alcohol	15.0
3. Alcohol	5.0
Ether	15.0
Glycerine	5.0
4. Oxalic acid	25.0
Phenylacetic acid	3.0
Water	3000.0

Winter considers polishing agents to be of particular importance for the care of the nails. These are available in the form of powders, pastes, creams and pencils. Tin oxide, tin oleate, kieselguhr, tripoli, waxes and rosins are all potential constituents. Polishing powders may be made as indicated in the following formulas:

1. Tin oxide	100.0
Talc	40.0
2. Tin oleate	100.0
Kieselguhr	60.0
Kaolin	20.0
3. Bourgogne rosin, light	160.0
Yellow beeswax	60.0
White ceresin	500.0
Kieselguhr	630.0
Zinc oxide	370.0
Liquid paraffin	80.0

Melt together the rosin and the waxes, add the liquid paraffin, then the powders, stirring vigorously while continuing to heat until a homogenous mixture is obtained. Allow to cool, pass through a grinding mill; finally powderize and sieve.

A nail polishing paste may be made from:

Powdered light rosin	160.0
Yellow beeswax	60.0
Liquid paraffin	300.0
White ceresin	200.0
Kieselguhr	270.0
Zinc oxide	170.0

A more elaborate polishing paste uses:

Beeswax	15.0
White ceresin	2.5
Bleached carnauba wax	2.5
Liquid paraffin	60.0
Cetyl alcohol	2.0
Water	23.0
Borax	2.0
Aluminum stearate	20.0

Melt the fats and waxes, add the borax solution, and finally the stearate. Cool while stirring. When the paste thickens, add a suitable perfume and incorporate 0.5 part of fish scale essence suspended in 5 parts of amyl alcohol.

A nail polishing cream is made from:

Carnauba wax	12.0
Beeswax	8.0
Tripoli	25.0
Powdered gum sandarac	4.0
Tin oxide	30.0
Liquid paraffin	60.0

If it is desired to make nail polishing pencils, the following formula provides a suitable composition:

Powdered light rosin	160.0
Yellow beesawx	60.0
Liquid paraffin	300.0
White ceresin	500.0
Kieselguhr	270.0
Zinc oxide	170.0

In concluding his section on nail polishes, Winter adds that tin oxide and tin oleate, while giving excellent results, are not altogether as indispensable as one is led to believe. Kieselguhr, with wax additions, also the oleates and stearates of zinc and aluminum, are equally effective.

among the cardinal amino acids

histidine: is converted to histamine *in vitro* by the action of ascorbic acid. (Holtz) • Apparently, the same conversion is effected *in vivo*, and this reaction may prove to be of value in the therapy of certain circulatory disturbances. (Wirtschafter and Widmann: J. A.M.A., 133:604—March 1, 1947)

lysine: is indispensable for nitrogen balance in the human. (Rose) • The medical and nutritional aspects of this essentiality merit further biochemical exploration.

arginine: it seems necessary to conclude that arginine is a human dietary essential. (Holt, Albanese, et al)

CRYSTALLINE *l*(+) HISTIDINE, LYSINE, AND ARGININE, AS THE MONOHYDROCHLORIDES, ARE NOW AVAILABLE FROM STOCK.

Interchemical Corporation Biochemical Division

UNION, NEW JERSEY

THERE IS NOTHING BETTER THAN

Italian TALC

The Standard for Over 50 Years

Italian Talc is, and always has been, the recognized standard in the cosmetic industry. In France, as in other countries, users of talc turn to Italy, where the natural rockstone produces a superfine product. It combines in the highest degree the features most desired. It has an unusual, silky texture.

The world's leaders use only Italian Talc.

CHARLES MATHIEU INCORPORATED

Representatives in the United States and Canada of the Italian Producers

77 RIVER STREET, HOBOKEN, NEW JERSEY

CODAN
REGISTERED TRADE MARK

GERARD J. DANCO, INC.

3 EAST 44th STREET • NEW YORK 17, N. Y.

Telephone: VAnderbilt 6-0981 Cable Address: CODAN, N. Y.

FINE ESSENTIAL AND FLORAL OILS
AROMATIC CHEMICALS
MUSK • CIVET • AMBERGRIS

Exclusive Agents in the United States and Canada For
Payan & Bertrand, S. A. • Grasse, France

DIRECT CONNECTION WITH THE
BELGIAN CONGO SINCE
1893

"Quality Merchandise Guaranteed by Reputation"

PAUL A. DUNKEL
AND COMPANY, INC.
IMPORTERS AND EXPORTERS
1 WALL STREET,
NEW YORK 5, N.Y.
Hanover 2-3750
CHICAGO:
919 N. MICHIGAN AVE.,
TEL. SUP. 2462

REPRESENTATIVES:
CHICAGO: CLARENCE MORGAN, INC.
BOSTON: P. A. HOUGHTON, INC.
PHILADELPHIA: R. PELTZ & CO.
ST. LOUIS: H. A. BAUMSTARK & CO.

GUMS *Chemicals and Oils*
(CRUDE, POWDERED)

GUMS:
GUM ARABIC
GUM ARABIC BLEACHED
GUM GHATTI
GUM KARAYA (Indian)
GUM TRAGACANTH
GUM EGYPTIAN
GUM LOCUST (Carob Flour)
QUINCE SEED
★
CASEIN

SPECIALTIES:
MENTHOL (Crystals)
★
TARTARIC ACID
★
CREAM OF TARTAR
EGG ALBUMEN
EGG YOLK
BLOOD ALBUMEN
JAPAN WAX (Special)
CANDELILLA WAX

ADVANCING THERAPY

Comparison of Penicillin X and G

Four different fractions obtained from the mold *Penicillium notatum* have been identified. These have been named penicillins F, G, K and X. The two that have received the greatest attention are the G and X fractions. Many commercial preparations containing varying percentages of these two fractions have been employed clinically with little attention to the actual composition of each product. This practice seems to be justified if studies of these two fractions reveal no significant differences in their properties, but is not justified if either is found to be superior. Accordingly, a study comparing the absorption, excretion, therapeutic activity and toxicity of penicillin G and penicillin X, and the *in vitro* sensitivity of various bacteria to these fractions was undertaken by G. Rotman-Kavka, H. L. Hirsh and H. F. Dowling (*New England J. Med.* 236:314 1947). In this investigation, the following preparations were employed: commercial penicillin, which contains at least 90 per cent of penicillin G, crystalline penicillin G, and penicillin X consisting of 75 to 95 per cent of the active substance. Since there were no differences in the results obtained with the various penicillin X preparations, they are all referred to as penicillin X. Commercial penicillin has been interchangeably called plain, regular and ordinary penicillin and penicillin G.

These studies showed that penicillin X achieves and maintains higher blood concentrations than the injection of similar amounts of penicillin G, whereas there is no essential difference between the crystalline and commercial penicillin G in this respect. Most bacteria are more sensitive to penicillin X than to penicillin G, but the difference is slight when they are compared on a weight basis. The therapeutic effects of all three preparations are similar, with a few exceptions. The incidence of toxic reactions was low and independent of the type of penicillin employed.

Hence it is concluded that in practically all infections caused by penicillin-sensitive organisms there is no obvious clinical difference between the effectiveness of the penicillin X and G fractions.

Glycerite of Hydrogen Peroxide vs TB

Laboratory and clinical work done by E. A. Brown and L. W. Slanetz (*Science* 105:312, 1947) indicates that glycerite of hydrogen peroxide has an antiseptic action against tuberculosis organisms. The solution consists of hydrogen peroxide (1.5 per cent) as derived from urea peroxide (4 per cent) dissolved in anhydrous glycerine. Although such solutions are relatively stable, a secondary stabilizing agent, 8-hydroxyquinoline is present in 0.1 per cent concentration. *In vitro* comparisons showed that the solution had greater bactericidal effect against the organisms, *Mycobacterium tuberculosis* (var. *hominis*) than penicillin and three sulfa drugs.

After other bacteriological studies had demonstrated its effectiveness, glycerite of hydrogen peroxide was tested clinically on four patients with tuberculous lesions of the body surface. All demonstrated "cold abscesses," a condition that does not heal spontaneously and for which no local measures have so far been effective. None of the lesions had responded to previous treatment. The glycerite of hydrogen peroxide was applied as a wet dressing two to six times daily. No other treatment was used. In three patients, the abscesses healed completely. In the last, who presented multiple lesions and is still under treatment, one lesion, though much smaller and obviously healing, shows occasional slight serious discharge. In no case was there evidence of irritation or allergic reaction to the treatment. In order to make certain that these were not temporary remissions, one year was permitted to elapse before the report was made.

Brown and Slanetz hope that their preliminary report will stimulate others to try glycerite of hydrogen peroxide for the treatment of tuberculous lesions.

Methionine in Anemia Therapy

Following experimental studies on animals, A. Gagdos (*Rev. Hematol.* 1:117, 1946) undertook a clinical trial of methionine for the treatment of anemia. Ten patients with anemia of various types, were given 1 to 2 Gm. of methionine divided into four to eight cachets daily for two to four weeks. There was no untoward reaction and a pronounced improvement in the erythropoiesis of 7 pateints, 3 with normocytic or hypochromic anemia secondary to hepatic cirrhosis, late untreated syphilis and duodenal hemorrhage, respectively, 1 with severe nutritional anemia, 1 with macrocytic anemia and 2 with normocytic anemia of unknown origin. Methionine was ineffective in 2 patients with pernicious anemia and in 1 with anemia secondary to diaphragmatic hernia. The slow and continuous increase in the number of red blood corpuscles with an average increase of 1,100,000 in two weeks may be explained partly by the amino acid character of the methionine and by its favorable effect on hepatic function.

Cold Test for Albumin in Urine

A new reagent developed by A. Bernhard and Y. Scherr (*Am. J. Clin. Path.* 16: Tech. Sect. 96, 1946) provides a simple and reliable qualitative method of detecting urinary albumin. To make the new reagent, a 20 per cent aqueous solution of sulfosalicylic acid is combined with an equal volume of methanol and filtered. To 5 cc. of urine, 6 to 8 drops of the final solution is added. The reagent forms a layer on the urine; after five minutes, white flocculation is proportional to the amount of albumin present. Albumin is noted in a ratio of 1:150,000 and the reaction does not change after an hour of standing. No false reactions occur; results were accurate in examinations of 10,000 specimens.

Antibacterial from Spanish Moss

A new crystalline antibacterial substance has been isolated by A.

SOUND A MELLOW NOTE
WITH
METHYL RHODIONE
REG. U. S. PAT. OFF.
depend on Du Pont
Need a violet note? A toner for a honey-sweet perfume? A variant for your delicate rose, a "green" effect for muguet? Or a hint of masculine, precious-wood and freshly tanned leather? Methyl "Rhodione" offers all these. Have you discovered the whole Methyl "Rhodione" family?
Methyl "Rhodione" Supra is the finest methyl ionone on the market.
Methyl "Rhodione" Extra's superb quality is recognized by leading perfumers everywhere.
Methyl "Rhodione" No. 1—especially designed for soaps—stable and long-lasting.
Your perfume program needs one of these products. But whatever the product, whatever the fragrance, why not put it up to Du Pont? E. I. du Pont de Nemours & Co. (Inc.), Organic Chemicals Dept., Aromatics Section, Wilmington 98, Del. Branch offices: Atlanta, Boston, Charlotte, Chicago, New York, Philadelphia, Providence, San Francisco.
Du Pont Aromatics
BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY
DU PONT
REG. U.S. PAT. OFF.

BIRTHPLACE OF CUSTOMER APPEAL!

Giving birth to remarkably brilliant colors that meet the most complex requirements of the industry—and developing them to the point closest perfection—has long been a principal function of the H. Kohnstamm laboratories.

True measuring sticks of color success are the drug or cosmetic manufacturers' plants, and the retail counters—and here, *Atlas Certified Colors* shine with a uniform brilliance and strength which reflect good business.

H. Kohnstamm and Company were the first producers of *Certified Colors.* Larger and more fertile than ever today, our extensive laboratories also produce Purified Titanium Dioxide, Purified Non-Aniline Colors and U.S.P. Zinc Stearate...all of which meet the highest standards of the drug and cosmetic industries.

For further information on how H. Kohnstamm can meet your requirements, write our nearest branch.

H. KOHNSTAMM & CO. INC. TRADE MARK HK ESTABLISHED 1851 STRENGTH · UNIFORMITY · PURITY

THE ATLAS LABEL PROTECTS YOU

FIRST PRODUCERS OF CERTIFIED COLORS

KOHNSTAMM & COMPANY Inc.

ESTABLISHED 1851

89 PARK PLACE, NEW YORK 7 · 11-13 E. ILLINOIS ST., CHICAGO 11 · 4735 DISTRICT BLVD., LOS ANGELES 11

ATLANTA · BALTIMORE · BOSTON · CINCINNATI · CLEVELAND · DALLAS · DETROIT · HOUSTON · INDIANAPOLIS · KANSAS CITY, MO. · MINNEAPOLIS · NEW ORLEANS · OMAHA · PHILADELPHIA · PITTSBURGH · ST. LOUIS · SAN FRANCISCO

Marshall *Public Health Rep.* 62:3, 1947) from the lichen, *Ramalina reticulata*, sometimes called California Spanish moss. Cold extraction of the lichen with acetone or acetone-alcohol gave good yields of approximately 8 Gm. of purified crystalline material per 10 lb. of lichen. This crystalline substance has a melting point between 191-192° C. and an empirical formula of $C_{18}H_{14}O_8$. In tests against a variety of microrganisms, several strains of tubercle bacilli were investigated in vitro. The human strains showed complete inhibition by concentrations of 1:50,000 and noticeable inhibition at concentrations as low as 1:2,000,000, with the exception of the Waller strain, which required a concentration of 1:20,000 for complete, and 1:200,000 for partial, inhibition. To determine whether the bacteria had been killed or merely arrested in growth, 0.5 cc. of the medium from each of the negative cultures of the human strains was inoculated intraperitoneally into guinea pigs, which were sacrificed and autopsied 7 weeks later. Only one animal showed tuberculosis. The other five animals showed no signs of disease.

Further studies showed that the crystalline substance can be administered subcutaneously in oil, daily, at a rate of 10-20 mg. per 350-400 gm. guinea pig for a period of 3 weeks without obvious toxic effects. When so administered to guinea pigs infected intraperitoneally with human tubercle bacilli it appears to retard the progress of the disease. This is evident from experiments in which there were twice as many deaths in the controls as there were in the treated group. On the basis of weight change, mortality, and findings at autopsy, the group of animals treated with the crystalline substance showed much less disease than the controls.

Dangers of Massive Vitamin D Doses

In a report in the *Annals of Internal Medicine* (25:508, 1946), G. W. Covey and H. H. Whitlock warn that vitamin D in massive doses is a powerful and dangerous drug which should be used with caution and that there are definite contraindications to its use. It mobilizes calcium from the trabeculae of the bones and thus raises the blood calcium level. It often produces cellular degeneration in various organs of the body, and this is most obvious in the kidney. The degenerated cells become the repository for calcium. The fat tissue of the body is rapidly burned up. Nitrogen may accumulate in the blood, presumably because of inability of the damaged kidney to excrete it. It is also apparent that mild intoxication with this drug is probably harmless unless it is permitted to continue over a long time and that complete restitution of the injured tissues usually takes place. In 4 of the 5 patients observed by the authors, ranging in age from 29 to 68 years, vitamin D was taken in dosage larger than is considered safe, namely 150,000 units per day. Two of the 5 patients were victims of arteriosclerosis and hypertension, conditions which have been said to contraindicate the use of this drug. Two patients increased the dosage voluntarily much beyond the amount ordered by the physician. The mental status of the first patient, while not obviously psychotic, was known to have deteriorated in comparison with previous observations. It is possible that psychic disorders, especially in the aged, should be regarded as a contraindication to the use of this substance in massive dosage. The most common symptoms were nausea, vomiting and headache. Associated with these symptoms there was a group of findings indicating renal injury.

Penicillin+Sulfadiazine for Gingivitis

According to a note in *Dental Survey* (23:462, 1947) A. C. Woofter and O. E. Hoffmann have found that combined penicillin and sulfadiazine provide a quick and satisfactory treatment for chronic gingivitis. After penicillin lozenges achieved only mild success in similar cases, five patients with old infections were treated four times daily for three days with a powder in which penicillin and sulfadiazine were dispersed in proportions of 500 Oxford units of the former to 0.25 grams of the latter.

Urea for Suppurating Ears

In reporting on the use of urea in the treatment of suppurations of the external auditory meatus, J. L. D. Williams (*J Laryngol. & Otol.* 61:251, 1946) states that this agent has been tried in aural furunculosis and has quickly established itself as the treatment of choice in any but the mildest cases. The meatus is first mopped out with cotton. Urea is then introduced on a gauze wick, dry for preference. It is sometimes difficult to get much urea to adhere to the dressing by this method alone. An alternative is to use narrow petrolatum gauze, the urea adhering more readily to it and the introduction of the dressing being less disagreeable, since the petrolatum acts as a lubricant. However, the urea is more efficacious in its "drawing" power if used dry, especially if the furuncles have begun to discharge. The dressings are repeatedly daily, preceded by careful toilet. Once the swelling has subsided and the furuncles have ceased discharging, it is advisable to discontinue the use of urea.

Testosterone in Angina Pectoris

In the *Journal of Clinical Endocrinology* (6:8, 1947), M. A. Lesser reports on the success obtained with testosterone in the treatment of 98 men and eight women suffering from angina pectoris. He administered 25 mg. of testosterone propionate twice a week for the first two weeks, followed by weekly injections of 25 mg., with an average of 12 injections in a series. No untoward results were observed. Some of the patients had received controlled injections of plain sesame oil and had shown no improvement, but responded when placed upon testosterone propionate therapy. Ninety-one of the 106 patients improved for periods of from two to 34 months. Exercise control tests on some of the patients showed that the amount of exercise which could be tolerated before the development of an anginal attack was increased greatly. Also, the severity of the attacks, measured by the duration of pain, was diminished.

Toxic Colitis from Sulfonamides

A new danger from sulfonamides is indicated in the report of H. Gauss and L. J. Weinstein (*Am. J. Digest. Dis.* 13:373, 1946). They cite the histories of 3 patients who developed toxic colitis following oral administration of sulfonamides. In 1 patient sulfathiazole had caused the colitis and in the other 2 sulfapyridine. The 3 patients presented singularly similar clinical pictures of the digestive tract. Sigmoidoscopy showed a granular swollen hemorrhagic mucosa. The patients all had a diarrhea with frequent hemorrhagic stools associated with severe abdominal cramps. With the withdrawal of the sulfonamides the symptoms subsided and the colon returned to its normal appearance.

The Chem-Arom Co.
NEW YORK, N.Y.
ESSENTIAL OILS AROMATIC CHEMICALS
PERFUME AND FLAVOR BASES

POWDAROM
FIXATIVE

.....a small quantity blended with your regular powder odor will definitely improve your finished product.

SAMPLE AND QUOTATION ON REQUEST

THE CHEM-AROM CO.
130 Water Street · New York 5, N. Y.

And...

- CREATE THE FORMULA
- DESIGN THE PACKAGE
- ORDER ALL MATERIALS
- DELIVER YOUR FINISHED PRODUCT
- READY FOR SALE

COMPLETE PRIVATE LABEL SERVICE

COSMETICS—PERFUMES

HOUSE OF HOLLYWOOD
777 E. Gage, Los Angeles 1

PRIVATE FORMULA
Tablets and Capsules

BY THE THOUSANDS---
OR BY THE MILLIONS

Over 30 years' experience enables us to render you prompt, accurate, and dependable service in the manufacture of your tablets and hard shell capsules. Our central location expedites delivery to any point in the country. Furnished bulk or packaged.

★

Vitamin Tablets and Capsules—Tablets—Ointments—Powders

★

We Invite Your Inquiries

Standard Pharmacal Co.
OF CHICAGO
PRIVATE FORMULA MANUFACTURERS
M. F. Charley, President
847-853 W. JACKSON BLVD.
G. C. Parsons, Vice President
CHICAGO 7, ILL.

GUMS

ARABIC-Sorts, Granular, Powder
KARAYA-Powder
LOCUST BEAN-Powder
TRAGACANTH-All Grades, Whole, Granular, Powder

GELLOID

(Pure Calcium Carragheen Sulfate)
Binder in Tablet Making
Moisture Retention in Dentifrices

JACQUES WOLF & CO.

Manufacturing Chemists and Importers
PASSAIC, N. J.

California Branch--339 East 2nd Street
LOS ANGELES, CALIF.

LAUTIER FILS

Natural and Aromatic Raw Materials
Essential Oils
for

Perfumery •

Cosmetics •

Soap •

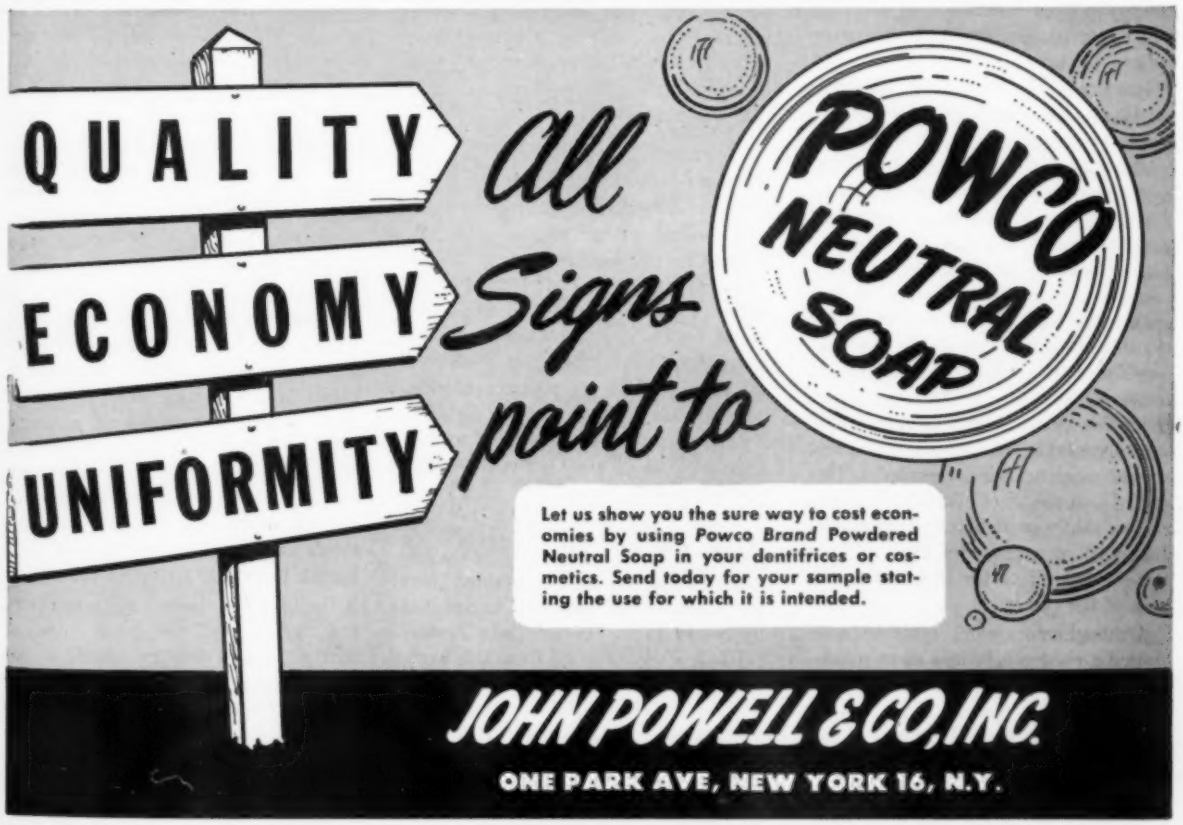
Lautier Fils

INCORPORATED

154-158 WEST 18th STREET NEW YORK 11, N. Y.

Grasse Paris London Beyrouth

MANUFACTURERS OF QUALITY RAW MATERIALS FOR PERFUMERY FOR OVER 100 YEARS


QUALITY
ECONOMY
UNIFORMITY
All Signs point to
POWCO NEUTRAL SOAP
Let us show you the sure way to cost economies by using Powco Brand Powdered Neutral Soap in your dentifrices or cosmetics. Send today for your sample stating the use for which it is intended.
JOHN POWELL & CO, INC.
ONE PARK AVE, NEW YORK 16, N.Y.

Perfumer's Shelf

Flavoring Agents for Masking Bitter Drugs

Distasteful substances are not relished by persons in good health, much less by those who are ill. Suitable flavoring of medications is a resonable concession to the feelings of the patient. In addition it secures more effective cooperation in following the prescribed treatment, and may be necessary to help assure retention of the medicine in the stomach. Of definite importance in this connection is the study reported by E. Boothe and K. L. Kaufman (*J. A. Ph. A.*, Pract. Pharm. Ed. 8:68, 1947) to find flavors that will mask the taste of certain bitter drugs and to establish a suitable method for appraising the vehicle. Previously reported studies on means for disguising distasteful medicaments cover comparatively few vehicles. In the present study ninety combinations containing quinine bisulfate, and seventy-five preparations containing urea were prepared and taste-test on student volunteers. The types of flavoring agents employed included essential oils, emulsion flavors, and syrups, elixirs, etc.

The flavoring agents containing the medicinals were studied in groups of five at one time, as a large number of samples could not be satisfactorily judged and their efficiency properly considered. For each group of five preparations the subject was to choose the drug that best disguised the bitterness and at the same time did not impart a disagreeable flavor. In many cases there were two or more in the group that were acceptable. In such cases, first and second choices were recorded. This served as a means of eliminating preparations that were definitely undesirable. In addition, a group of four subjects taste-tested all of the preparations in each of the two series.

Although more work must be done to make valid conclusions as to palatability, certain preference trends have already become apparent. The data obtained indicates that: 1. Spirits of cinnamon and orange compound; emulsions of orange and lemon oils; the mints, especially creme de menthe extract and oil of peppermint; and the syrup of cacao and acacia are among the better masking agents for quinine bisulfate. These results confirm in general previously reported work. 2. Among the imitation flavors readily available, more attention should be given to root beer extract, peach, cherry, blackberry, grape and pistachio. These flavoring agents are inexpensive and easy to use. 3. The oils of fennel, star anise, cassia and lemon are deserving of more attention for masking the bitterness of quinine bisulfate.

In the tests of urea solutions, results were somewhat similar. The mints and the oils of star anise and cassia showed up well in disguising its bitter taste, as did the orange spirit. Syrups of acacia and cacao appeared to be relatively less effective for urea than for the quinine salt. Tincture of sweet orange peel and several artificial flavors, namely, licorice, plum, apricot, grape and raspberry, seemed to be relatively more effective in disguising the taste of urea than in disguising quinine.

Russian Method for Higher Yield of Rose Oil

According to the claims of K. R. Dalmatov in Russian patent 66,659 (through *Chem. Abstr.* 41:1816, 1947) a higher yield of essential oil from rose petals is obtained when the petals are covered with a salt solution, such as a saturated solution of sodium chloride. The essential oil is then steam distilled. By this method the loss of oil of roses is reduced from 20 to 30 per cent to from 5 to 8 per cent.

Davana Oil

New work on the oil obtained from the aromatic herb, Davana, is reported by Sastry in the *Indian Soap Journal* (11:242, 1946). The oil from this herb, identified as *Artemisia pallens*, Wall., was first obtained by this worker about a quarter of a century ago. Only small amounts were available and the oil commanded a high price. Now cultivated near Mysore, it has become possible to determine the most suitable variety of plants giving the highest yield of oil. After large scale experiments the yield of clean oil was found to range from 0.13 per cent to 0.3 per cent. Davana oil obtained by steam distillation had the following constants:

Specific gravity at 15.5° C.	**0.9605**
Index of refraction at 20° C.	**1.4880**
Optical rotation	**+35**
Acid value	**2.4**
Ester value	**52.9**

The oil was found to be soluble in 10 volumes of 70 per cent alcohol, but the solution obtained was slightly opaque. Further trials showed that the cohobation method of distillation gave the highest yields of oil.

Ketals in Perfumery

Another of the interesting and comprehensive reviews of perfume raw materials written by R. W. Moncrieff (*S.P.C.* 20:58, 1947) is concerned with the structure, properties, preparation and application of the ketals. It is explained that ketals are ketone acetals. Just as acetal is formed by the addition of an aldehyde to an alcohol, so is a ketal formed by adding a ketone to an alcohol. There are instances where the conversion of a ketone to a ketal is accompanied by a desirable change of odor, and in some cases the ketal may have a nuance not otherwise obtainable.

As a general rule ketals are colorless liquids with characteristic odors. Acetone dimethyl acetal $(CH_3)_2\,C(OCH_3)_2$ boils at 83° C. and the corresponding ketal from acetone and ethyl alcohol which is acetone diethyl acetal $(CH_3)_2\,C(OC_2H_5)_2$ boils at 114° C. Ketals may be prepared by reacting ketones with orthoformic esters in the presence of alcohols. Small quantities of anhydrous acids are necessary to promote the reaction. Another method of preparing ketals is by reacting acetylenes with alcohols in the presence of mercuric oxide or boron trifluoride as a catalyst. In some cases trichloracetic acid may also be used as a catalyst. Other procedures which may be used to make ketals have been given in patents (e.g. British Patents 352,474 and 385,139).

Up to a few years ago, ketals were not used in perfumery, but more recently certain dehydric alcohols and ketones have been found to give ketals suitable for use in perfumes. Studies have shown that when the ketone residue contains from 6 to 9 carbon atoms the condensation products with pyrocatechol are attractive odorants.

...ONLY THOSE *whose goal i*

to produce the finest perfum

will be interested in these

SEILLANS FLORAL ABSOLU

TO PRODUCE *one pound* of Orange Flowers Absolute Seillans, it takes *half a million* blossoms—or the normal yield of from 40 to 50 neroli bigarade trees. From three to four million jasmine flowers are needed to produce a single pound of our incomparable Jasmine Absolute Seillans.

In the light of such figures, the costliness of these superb materials can be ea appreciated. They are, in fact, the most highly priced — and the most highly prized ingredients used in present day perfuming.

Employed sparingly, in the hands of skilled perfumers, their addition to the formula lends a depth and quality of fragrance found only in the living flower . . .

We are glad, once more, to be able to offer these five important Seillans Floral Absolutes for immediate delivery to those manufacturers who find satisfaction in nothing but the best.

Write, phone or wire us for quotations.

FRITZSCHE *Established* 1871 *Brothers, Inc.*

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* STOCKS: *Boston, Mass., Chicago, Ill., Los Angeles, Calif., St. Louis, Mo., Toronto, Canada and Mexico, D. F.* FACTORIES: *Clifton, N. J. and Seillans (Var), France.*

se goal it is
t perfumes possible
these
SOLUTES . . .

bsolute Seillans, it takes nearly
m 40 to 50 neroli
e flowers are needed to
Absolute Seillans.
erb materials can be easily
iced — and the most
ng.
ers, their
f
important

ROSE

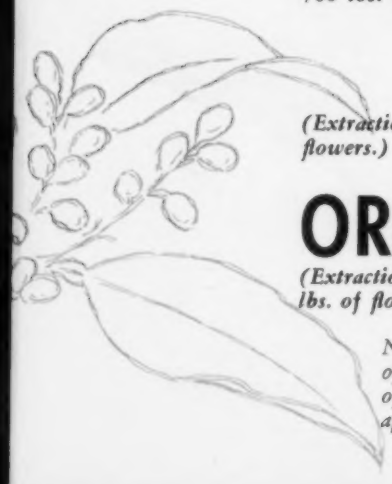
(Extraction of 1 lb. of Absolute requires from 800 to 1000 lbs. of flowers.)

MIMOSA

(Extraction of 1 lb. of Absolute requires about 650 lbs. of flowers.)

JASMINE

(Extraction of 1 lb. of Absolute requires approximately 700 lbs. of flowers.)



SAGE CLARY

(Extraction of 1 lb. of Absolute requires about 360 lbs. of flowers.)

ORANGE FLOWERS

(Extraction of 1 lb. of Absolute requires from 750 to 1000 lbs. of flowers.)

Note: Seasonal variations, weather conditions, time of harvest and numerous other factors affect the yields of these flowers. Figures given, therefore, are only approximations.

REWARDS FOR QUALITY...

WE believe most manufacturers today take keen, personal pride in the quality of their finished merchandise . . . and in the excellence of materials that go into their manufacture. We also believe that something much more tangible than an inner sense of satisfaction is their ultimate reward for such superiority. Consider the matter of selling these products: Is there any factor more reassuring to the salesman or more strengthening to his sales approach than absolute confidence in his product's quality? And does anything provide firmer grounds for such confidence than the certain knowledge that they are made of the very finest raw materials? All in all, the use of genuinely good materials reaps a harvest of sales, satisfaction and good will that far outweighs their cost.

Perfume manufacturers using any of the raw materials featured on the front or back pages of this insert can truthfully claim that their finished perfumes contain the finest ingredients that money can buy. We commend these materials for your earnest consideration.

FRITZSCHE BROTHERS, Inc.

COME TO HEADQUARTERS FOR YOUR BEST BUYS IN ORRIS. . . .

- **OIL ORRIS FLORENTINE CONCRETE EXTRA**
- **OIL ORRIS FLORENTINE CONCRETE**
- **OIL ORRIS FLORENTINE TENFOLD EXTRA**
- **RESINOID ORRIS ROOT**

THESE exquisite specialties hold a high place in the estimation of all perfumers who have used them. And rightly they should, for they are products of critical selection and rigid control. Only hand-picked roots are used, and then, not until prolonged aging has conditioned them to yield oils of finest odor. This, coupled with the carefully controlled process of distillation which we employ, results in products of highest irone content and powerful, yet soft, violet-like odor. May we quote you on these outstanding products?

FRITZSCHE *Established* 1871 *Brothers, Inc.*

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES *and* STOCKS: *Boston, Mass., Chicago, Ill., Los Angeles, Calif., St. Louis, Mo., Toronto, Canada and Mexico, D. F.* FACTORIES: *Clifton, N. J. and Seillans (Var), France.*

If the ketone is too simple, i.e., if it contains fewer than 6 carbon atoms, the pleasant odoriferous characteristics do not develop in the condensation product with pyrocatechol, and if on the other hand the ketone possesses more than 9 carbon atoms, the condensation product is of such a high molecular weight that it is practically inodorous. To comply with this specification of from 6 to 9 carbon atoms limits the choice of ketones in practice to those shown in the table following:

(1) **Dipropyl ketone** $C_3H_7.CO.C_3H_7$
(2) **Diisopropyl ketone** $(CH_3)_2CH.CO.CH(CH_3)_2$
(3) **Dibutyl ketone** $C_4H_9CO.C_4H_9$
(4) **Diisobutyl ketone** $(CH_3)_2CHCH_2CO.CH_2CH(CH_3)_2$
(5) **Methyl butyl ketone** $CH_3COC_4H_9$
(6) **Methyl amyl ketone** $CH_3COC_5H_{11}$

The ketals from the symmetrical ketones (1), (2), (3) and (4) resemble in odor natural geranium or rose oil, whereas ketals from the unsymmetrical ketones (5) and (6) are suitable for compounding jasmin mixtures. It may be noted that the ketal from methyl amyl ketone, which is the best for jasmin perfumes, has in common with jasmin aldehyde (α-amyl cinnamic aldehyde) the possession of an amyl group.

The ketal from pyrocatechol and diisopropyl ketone is particularly suitable for incorporation in geranium or rose perfumes. The ketal from pyrocatechol and diisobutyl ketone, which is a 9 carbon atom ketone, is particularly suitable for honey perfumes. The unsymmetrical ketal from methyl amyl ketone and pyrocatechol is useful in jasmin perfumes.

In concluding his discussion of the ketals, Moncrieff observes that it may well be that such compounds will prove of considerable value to the perfumer. In particular, research would appear to be well worth while to investigate the odors of ketals made from other dihydric phenols, resorcinol and hydroquinone and also from orcinol. It is unlikely that the trihydric phenols such as phloroglucinol would give ketals similar in configuration and complexity to those from pyrocatechol but it would be a simple and interesting experiment to condense phloroglucinol with diisopropyl ketone and see what the odoriferous properties of the product offer. Saligenin which is simultaneously a phenol and an alcohol is another body which condensed with diisopropyl ketone might offer unusual possibilities. It would, indeed, seem that in the ketals, the perfumers are confronted with a field which is wide, probably fertile and almost completely unexplored.

Two Perfuming Suggestions

Many perfumers are not familiar with the importance of phenyl acet aldehyde dimethyl acetal in hyacynth, lilac and other flowery compositions. The general trend in the past has been to use phenyl acet aldehyde but the characteristic fragrance is not as delicate, and rough, sharp notes in these flower type compositions are not too desirable. Phenyl acet aldehyde has the peculiarity of polymerizing as soon as it is made and therefore requires preservation in alcohol or some other odorless solvent such as diethyl phthalate. When completely polymerized phenyl acet aldehyde has no odor; therefore it must be tested to determine the aldehyde content before use, otherwise the odor percentage varies. On the other hand, phenyl acet aldehyde dimethyl acetal is much more stable and does not polymerize. Being completely stable and lasting, it is an excellent product for use in soap odors where a fine hyacinth note is required.

Perfumers should also look into the possibilities of hexyl cinnamic aldehyde. It resembles amyl cinnamic aldehyde in odor characteristics, but is much softer and not so fatty. Hexyl cinnamic aldehyde is not as intense in odor value but, especially when used in artificial jasmine type compositions, develops a smoother and sweeter note more characteristic of the flower than amyl cinnamic aldehyde. At present, no one is making hexyl cinnamic aldehyde in any great quantity, but if more perfumers were aware of its possibilities they would replace the amyl compound with the hexyl compound.

German Synthesis of Vanillin, Coumarin and Anisaldehyde

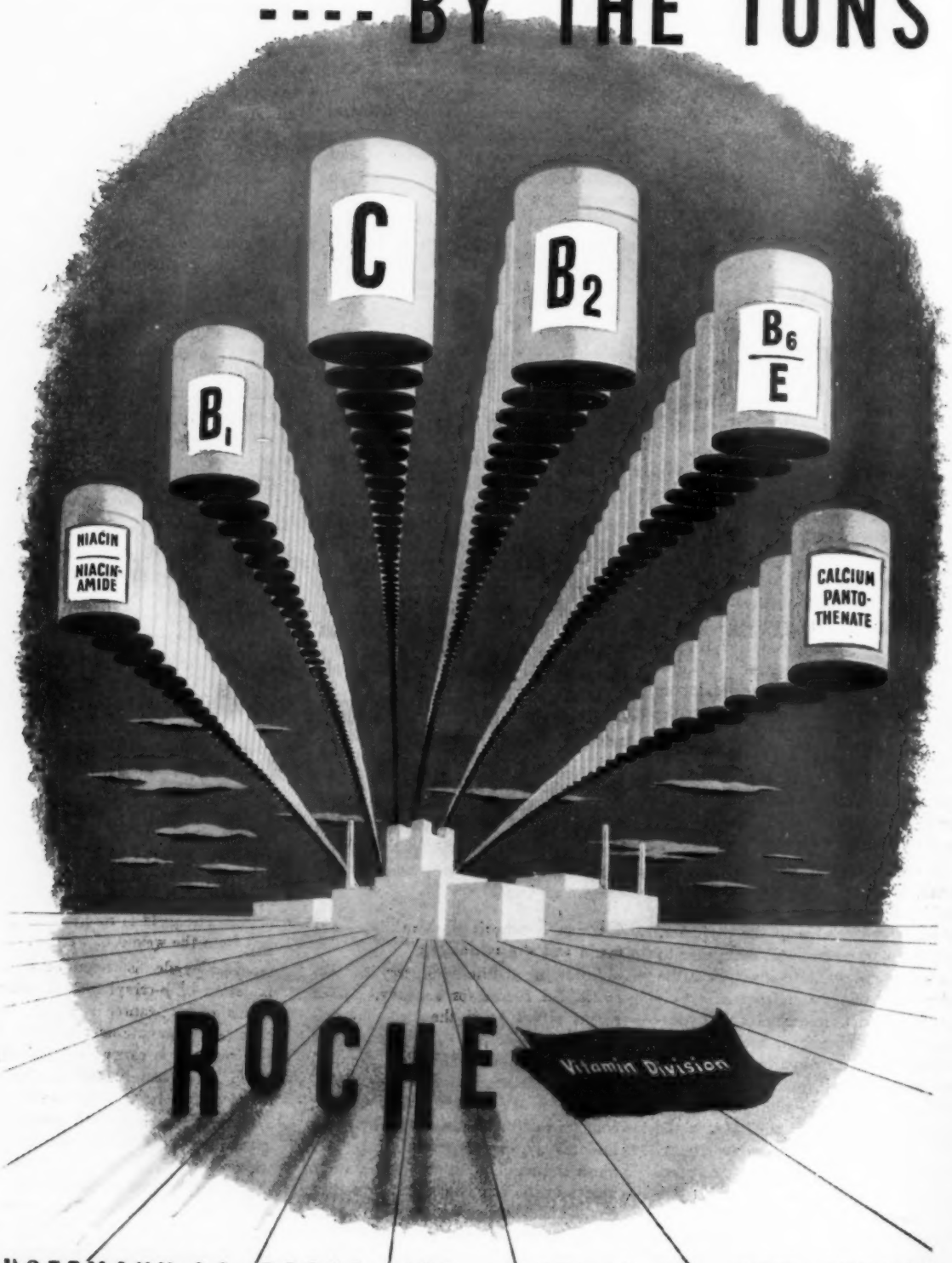
According to the *Perfumery and Essential Oil Record* for January, 1947 a recent report from the British Intelligence Objectives Sub-Committee (*Final Report No. 665*; *item No. 22*) describes methods used at Mannheim-Waldhof in the manufacture of vanillin, coumarin and anisaldehyde. The vanillin was synthesized starting by the diazotization of *o*-anisidine with sodium nitrite in the usual way, decomposition being affected by boiling with copper sulphate solution and the guaiacol distilled off. This is then reacted with nitrobenzenesulphonic acid solution in dilute hydrochloric acid solution, 30 per cent formaldehyde being added at about —2° C., together with thin aluminium foil. The report states that the chemistry of the reaction is uncertain, vanillin being present as a loosely formed compound with the sulphanilic acid. The mixture is then brought to near neutrality (*p*H 6.5-7.0) by the addition of caustic soda and the vanillin extracted with benzol at 55° C. It is allowed to crystallize out, is centrifuged and then distilled for purification, coming over at 155° C. at 10 mm pressure. It is finally recrystallized from 25 per cent alcohol. The yield reported is 66 kg. vanillin from 100 kg. *o*-anisidine. As byproducts of the process, metanil yellow can be made from the aqueous solution after extraction with benzol, and the plant was equipped for the working up of the vanillin oil and the separation of *iso*-vanillin and *o*-vanillin in addition to the recovery of any guaiacol not used in the reaction. It is thought that this process presents no unusual features and that it would prove to be non-competitive with vanillin made from lignin as a by-product of the sulphite process.

Coumarin is made from *o*-cresol *via* *o*-cresol carbonate and its dichlor compound. The first stage of producing the *o*-cresol carbonate is accomplished from the reaction between *o*-cresol and phosgene, the precipitate of *o*-cresol carbonate being filtered off, dried and redistilled at 10-16 mm pressure. This is then chlorinated to obtain the dichlor compound and this is then reacted with potassium acetate at 200°-250° C. The coumarin formed is extracted with benzol, which is then evaporated off, the coumarin then being distilled over at 10-14 mm pressure. It is then recrystallized from 90 per cent alcohol, distilled once more, recrystallized further from alcohol and finally dried in vacuum at 50° C. The yield is recorded as 73 per cent from the weight of *o*-cresol.

Anisaldehyde is manufactured by oxidation of *p*-cresyl methyl ether by means of manganese sulphate, potassium permanganate and sulphuric acid. The reaction is carried out initially at 20° C. and then at 40° C., the total reaction time being about seven hours. The anisaldehyde is first recovered by extraction with toluol, washed with water and sodium acetate solution and finally by various redistillations. The last distillation is carried out in an aluminium still at 160°-170° C. From 160 kg. cresol ether 68 kg. anisaldehyde are obtained.

SUPERIOR QUALITY VITAMINS

---- BY THE TONS



HOFFMANN-LA ROCHE, INC., NUTLEY 10, NEW JERSEY

PURCHASING DEPARTMENT

Denatured Alcohol Prices Undergo Slight Revision

Prices on denatured alcohol underwent slight revisions as all producers set and reset prices to conform with costs and competition. Quotations became:—CD14, tanks, 97½c per gallon; drums, carlots, $1.04½c; less carlots, $1.07½ to $1.11½; SD1, tanks, 98c; drums, carlots, $1.05; less carlots, $1.08 to $1.12; SD2B, same as SD1; SD23H, tanks, 96½c; drums, carlots, $1.03½c less carlots, $1.06½ to $1.10½; SD29, same as SD1; special solvent, tanks, 98½c; drums, carlots, $1.05½c; less carlots, $1.08½ to $1.12½c.

The marked lack of buying interest in the Government's third lot of Cuban alcohol indicates an easier supply position for this vital solvent during May and June, industry observers said. It was also viewed as a distinct reversal for the Government's policy of allowing competitive bidding for scarce, essential commodities through the Reconstruction Finance Corporation.

Industry authorities point out that while the RFC announced bidding prices for the first two lots of Cuban alcohol were 83c and 67.9c per gallon, respectively, the figures did not take into account a 12c duty on the material.

The landed price on basis of these bids was 85c and 79c per gallon. Storage, handling, redistillation and distribution costs must be added to these prices as well, they point out.

The lone bid of 41¼c per gallon received for the third lot of Cuban alcohol was rejected by the RFC as being below what the alcohol cost them.

The fact that Cuban alcohol must be stored and handled separately from domestic stocks of alcohol was given as one reason for the lack of buying interest on the part of other alcohol processors. Recent heavy sales amounting to 2,500,000 gallons would indicate that other domestic producers are well stocked with Cuban alcohol for the immediate future, which reflects easier supply position in May and possibly June.

It does not herald, however, any

(Continued on page 705)

Turning Point in Price Trend of Fine Chemicals Indicated. No General Weakness but Declines Evident.

APRIL PRICE CHANGES

UP

Bergamot oil 15c
Cresol USP ¾c
Grape fruit oil 15c
Lime oil dist. 25c

DOWN

Aconite root 5c
Agar agar 75c
Amylsalicylate 11c
Anise oil 10c
Anisic aldehyde 40c
Balsam Peru 5c
Tolu 10c
Benzoin gum Sumatra 10c
Benzophenone 5c
Bois de rose, Brazil 15c
Cajuput oil 10c
Calcium sulfide 5c
Cantharides Chinese $1.10
Cardamom oil 50c
Casein edible 11c
Cassia oil redist. 45c
Cedar leaf oil 10c
Chamomile flowers Hung. 3c
Citronella oil Ceylon 15c
Java 25c
Clove oil 5c
Cream tartar 4c
Cubebs oil 50c
Ephedra vulgaris 8c
Ergot 30c
Eucalyptus oil 5c
Gentian root 8c
Geranium oil African 50
Bourbon 25c
Glycerin 5c
Henbane leaves 20c
Ipecac root 50c
Lemon grass oil 70c
Magnesium stearate 4c
Menthol Nat. 25c
Mercury metal $1
Orris root Flor. 5c
Papain pure Powd. 75c

(Continued on page 701)

• Prices quoted in this section were current on the first of this month.

Glycerin—Stearates—Tallow—Rosin—Turpentine and Most Oils and Fats Decline in Price

With basic chemical commodities such as glycerin, stearates, tallow, rosin, turpentine, and most oils and fats showing marked declines, qualified observers in the chemical industry feel that the turning point in the upward trend of chemical prices has been reached.

They do not forecast a general price tumble, however, because of two principal factors. First, demand from major consumers is still far above available supplies of most basic items and it would take more than a mild recession to bring consuming requirements down to the current productive capacity of the industry. Secondly, production costs, labor costs, and costs of expanding production facilities are still on the upgrade.

But declines have been evident during the trading period under review which have given many chemical men cause to eye inventory buying with suspicion.

Today prices are more closely allied with production costs and a comparative absence of long term commitments tends to minimize the danger of any huge financial losses.

In addition, basic commodities like alkalies, coal-tar chemicals, drugs and pharmaceuticals have not shown the marked increases that have been prevalent in other major industries.

Most industry observers, however, issue the warning, particularly to small chemical businesses who are not so closely in touch with underlying price trends, to watch inventory buying and avoid excessive stocks.

While observers do not attribute the declines directly to President Truman's policy of "talking prices down," they do state that Mr. Truman's stand has caused consumers to stop heavy buying and start shopping around.

Now available
for the drug and cosmetic industries

COMPOUND G-4

$C_{13}H_{10}Cl_2O_2$ **BACTERICIDE AND FUNGICIDE** MOLECULAR WEIGHT 269

Nomenclature: bis (5-chloro-2-hydroxyphenyl) methane; Dihydroxydichlorodiphenylmethane.

Melting point: 172 to 175° C.

Color: White to slightly pink.

Odor: Faintly phenolic.

Bactericidal properties:

F. D. A. phenol coefficient 90 at 37.5° C. against Staphylococcus aureus.

F. D. A. phenol coefficient 110 at 20.0° C. against Eberthella typhosa.

A. O. A. C. phenol coefficient 50 at 20.0° C. against Trichophyton interdigitale.

Solubility: Soluble in alcohols, ketones, propylene glycol, vegetable oils, fixed alkalies. Insoluble in water.

Toxicity: Non-toxic and non-irritating.

Suggested uses: Compound G-4 can be used as the active ingredient in athlete's foot preparations, including powders, lotions and ointments, and in veterinary remedies for the treatment of ringworm infections; it can be utilized as a topical antiseptic for superficial wounds and in such cosmetic products as deodorant colognes and powders; and as a fungicide, it will prevent mold growth and act as a preservative in hair wave sets, lotions, cold creams, ointments and many other cosmetics.

"BUY WISELY—BUY GIVAUDAN"

Givaudan-Delawanna INC.

Industrial Products Division · 330 West 42nd Street, New York 18, N. Y.

EDW. S. BURKE
J. F. HOLLYWOOD

Representing:

CARUS CHEMICAL CO., INC.

BENZOIC ACID U.S.P.
SODIUM BENZOATE U.S.P.
HYDROQUINONE
MANGANESE SULFATE
POTASSIUM PERMANGANATE
RARER PERMANGANATES

BENZOL PRODUCTS CO.

AMINOACETIC ACID (Glycocoll)
AMINOPHYLLINE U.S.P
BENZOCAINE U.S.P.
CHINIOFON (Yatren) U.S.P.
CHLORBUTANOL U.S.P.
CINCHOPHEN & SALTS N.F.
IODOXYQUINOLIN SULPHONIC ACID
NEO CINCHOPHEN U.S.P.
OXYQUINOLIN BENZOATE
OXYQUINOLIN SULPHATE
POTASSIUM OXYQUINOLIN SULPHATE
PHENOBARBITAL U.S.P. & SALTS
PENTOBARBITAL SODIUM U. S. P.
THEOPHYLLINE U.S.P.
DIACETYL
PHENYL ACETIC ACID
BENZALDEHYDE
BENZYL ALCOHOL
BENZYL CHLORIDE
BENZYL CYANIDE
DIETHYL MALONATE
DIMETHYL UREA
CYANOACETAMIDE
CYANO ACETIC ACID
ETHYL CYANO ACETATE
8-HYDROXYQUINOLIN
8-HYDROXYQUINOLIN-5 SULPHONIC ACID

EDW. S. BURKE
Established 1917
65 PINE STREET · NEW YORK 5, N. Y.

FOUNDED T & B 1856
The Symbol of Standardization

GUMS

ARABIC
TRAGACANTH
KARAYA

WHOLE GUM—Cleaned and repacked before shipment.

POWDERED GRADES—Standardized by milling under strict laboratory control.

GRAIN GUMS—Graded to uniformity and standardized.

T & B STANDARDIZED GUMS are your best protection against production difficulties.

All Powdered Gums Standardized by Laboratory Control

THURSTON & BRAIDICH
286 Spring Street New York 13
Represented in Chicago by A. C. DRURY & Co., INC.

Glycerin Prices Drop—Mercury Declines Again

Although there is some reason to think that progress is being made toward domestic production meeting domestic needs, there is still more glycerin required than is being produced. A decline of 5c per pound in glycerin, making the market 60c per pound, reflected declines in prices for soapers' oils in the past few weeks.

Demand for glycerin for the account of the plastic industry continues to be adversely affected by the shortage of phthalic anhydride but there is a good call for the article from other industrial channels. From a supply standpoint, the situation remains firm notwithstanding the recent reduction in quotations. Stocks of glycerin at the end of February amounted to about 43,000,000 pounds (absolute basis) or well below the 50,000,000 pounds reserve that was regarded as a safe level during the war period.

A little tonnage of soap lye glycerin is reported moving on the basis of 33c per pound. Saponification for refining purposes is quoted at 37c per pound.

Mercury Down

The extended period of inactivity in mercury is reflected in lower prices ranging from $86 to $90 per flask. A total of about 2500 flasks have arrived from Spain, but it is understood that

(*Continued on page 705*)

Cod Liver Oil Easy

Current spot prices on medicinal cod liver oil may be shaded slightly. New lots have arrived from Norway on the steamer Frierfjord and, due to seasonal influences, the demand here is quiet. The arrival, amounting to four lots, included 1250 drums and 360 barrels.

Norway, leading producer of medicinal cod liver oil, is anticipating a record production this year of about 100,000 tons. The output by March 20 was over 47,000 tons, or nearly twice the figure for the same period last year. Local importers point out, however, that, although the catch has been large, only very limited amounts of high potency oil have been offered from Norway. Most offerings, it is said, consist of oil with a potency that is only U.S.P.

APRIL PRICE CHANGES (Down)

(*Continued from page 699*)

Petit grain oil 10c
Pimento leaf oil 50c
Pine needle oil 50c
Rhubarb root 5c
Sabadilla seed 8c
Spearmint oil 25c
Stearic acid TP 1½c
Tartar emetic 3c
Tartaric acid 5c
Tragacanth gum #1 $1
#2 40c
Witch Hazel leaves 5c
Wormseed oil 10c
Zinc stearate 4c

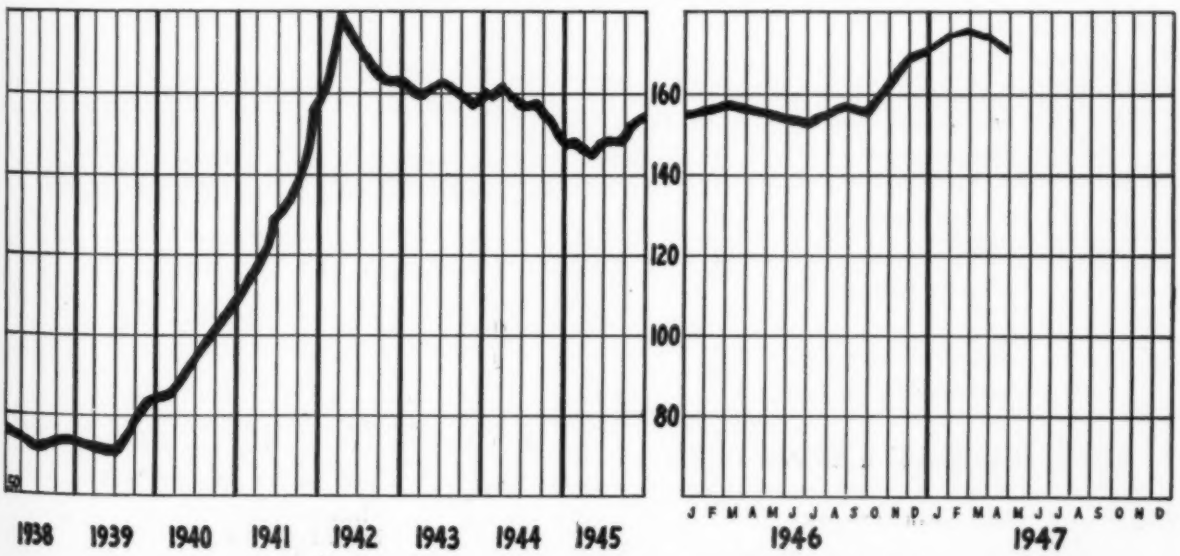
Essential Oil Prices Continue Downward Trend

Essential oil prices during the period under review continued their downward trend, especially for oils that are on an import basis. This condition has existed for the past few months and shows little indication of leveling off. However, lower prices have generally followed the importation of an oil or when it becomes available on spot. Principal reason for the general lowering of prices has been the constant improvement in supplies and the general lack of consumer interest at the present time. Imports have brought additional supplies to the United States market.

Domestic essential oils show little tendency toward lower prices, in fact, most of these have strengthened because of the increased cost of production. The high cost of producing orange and lemon oils, together with the anticipated demand for the summer trade, has materially strengthened the price position of these items.

Essential oil imports in 1946 on an over-all basis increased over 1,100,000 pounds or 16 percent as compared with 1945. This fact points to a larger supply of numerous oils, some of which have been scarce on the domestic market and especially those not available for import during the war. In 1947 the supply of essential oils generally should be more plentiful; however, a number of oils will very likely continue in short supply.

50 Raw Materials—Weighted Price Index. 1926–100.



The price index of fifty commodities for April declined from 172.9 to 168.7.

For Non-Greasy
Sun-Screen Bases
Try

R·T·VANDERBILT·CO·N·Y·S· VEEGUM AMERICAN PRODUCTS

VEEGUM is compatible with commonly used sun screens. Stable, quick spreading creams and lotions are being made with VEEGUM.

Literature and samples available on request

R. T. VANDERBILT CO., INC.
Specialties Department
230 PARK AVENUE, NEW YORK 17, N. Y.

EXPORT EXPORT

ANETHOL N. F.
PURE, ODOR AND FLAVOR OF OIL OF ANISE

"GUM SYNTHOBENZOIN"
(SYNTHETIC GUM BENZOIN)
FIXATIVE PROPERTIES, CONSTITUENTS, ODOR, TASTE AND PURITY CLOSELY CORRESPOND TO THOSE OF THE NATURAL GUM BENZOIN OF THE SAME TYPE.

"PUROMINT"
SELECTED GRADE NATURAL PEPPERMINT EXTRACT (OIL)

"SYNTHOMENTHOL"
SYNTHETIC MENTHOL CRYSTALS HAVING COOLING EFFECT AND ODOR SIMILAR TO NATURAL MENTHOL

ESSENTIAL OILS — FLAVORING OILS
SPECIAL COMPOUNDS
VITAMINS • HORMONES

FINE CHEMICALS - PHARMACEUTICALS

BENDIX CHEMICAL CORPORATION
420 Lexington Ave. MUrray Hill 3-5821 New York 17, N. Y.
Cable Address: BENDIX CHEM

Have You Tested

VORAC'S NEW NAIL POLISH

Vorac, first again to incorporate into nail polish formulation remarkable new materials developed by famous research laboratories, gives you a Nail Polish greatly improved in wearing quality, application and appearance.

Make a consumers comparative test with Vorac. It will be revealing.

Write for your samples.

Nail Polish Specialists
Exclusively for the trade

THE VORAC COMPANY
147 Meadow Road Rutherford, N. J.
Tel: Rutherford 2-0934-5
St. Louis, Mo. - 1338 So. Kingshighway

MYSORE GOVERNMENT
Sandalwood
~~ Oil ~~

Distilled from
Santalum Album

{ INSIST ON ORIGINAL CANS AND CASES }

Sole Agents for the United States
In Canada: *Sole Agents*
W. J. BUSH & CO. (*Canada*) Ltd. Montreal

W. J. BUSH & CO.
(Incorporated)
Essential Oils
New York
Chicago National City, Calif. Montreal

Citronella Oil Prices Drop — Ceylon and Java Down

Quotations on Ceylon citronella oil dropped rather sharply to establish a new price range at from $1.90 to $2. A more than adequate supply now seems available, with no major development of buying interest. Suppliers who had not quoted on the Java oil for years returned to the market, giving indications of a more favorable supply situation. This return was in large measure inspired by the report that Java was now in a political situation in which it was free to provide the oil in quantity.

Exports of citronella oil from Ceylon expanded to 1,017,251 pounds valued at 4,256,726 rupees during the first half of 1946, as compared with 683,996 pounds valued at 1,911,241 rupees in the January-June period of 1945. Shipments to the United States dropped to 112,587 pounds valued at 513,651 rupees in the first half of 1946, from 232,041 pounds worth 707,675 rupees in the corresponding months of 1945.

Ceylon exported a total of 1,143,132 pounds of cintronella oil valued at 3,319,397 rupees in 1945. Shipments to the United States accounted for one-third of the entire quantity exported.

Exportation of citronella oil from the Netherlands Indies has been resumed, the value of these shipments ranking fairly high among total exports in 1946. Exports of citronella oil, however, were drawn entirely from old stocks found in Batavia after the war.

Citronella oil shipments to the United States from the Netherlands Indies began to arrive in April 1946, total arrivals for the year amounting to 85,888 pounds, valued at $316,998. In 1943 and 1944, the United States received very small quantities of the oil from the Netherlands Indies, either delayed in transit or withdrawn from bonded warehouses.

The raw material for citronella oil grows in the Preanger region of West Java. Production was maintained during Japanese occupation, although at reduced rates, and appreciable quantities stocked in the Preanger Residency may be exported during 1947.

Crude Drug Prices Drop Again as Overseas Supplies Increase — Vanilla Beans in Firm Position

Crude drugs and materials for drug and other uses, as groups, continued their downward price trends during the current trading period, especially for imported items, even though the demand for numerous summer botanicals was improving.

Crude drugs should be more plentiful during 1947 according to reports from supply sources overseas. While individual quantities of crude botanicals during 1946 enjoyed gratifying import advances over 1945, the aggregate gain was less than 2,000,000 pounds or 10 percent ahead of 1945.

Vanilla Firm

New crop cut vanilla beans should be available within a few weeks from Mexico but new crop whole beans will not be available until June. The prices quoted on cut beans by major shippers in Mexico remain firm and high and there appears to be little hope for any marked reductions in spot prices despite the current lull in activity here.

Stocks of beans in the hands of local dealers are believed to be rather small.

Antalaha, center of the vanilla bean growing area on the island of Madagascar, isolated from most of the island and connected with Sambaya, vanilla bean shipment port, is virtually cut off, according to the newspaper "Raillie-ment," of Tananarive.

Economic conditions have become acute since ships no longer call at Antalaha and to get beans to a shipment port means travel on a rough trail approximately ninety kilometers long, through a country recently in revolt. Another trail, approximately 500 kilometers in length has been wiped out by disuse and even though it was usable, the transport cost to Antalaha would be prohibitive.

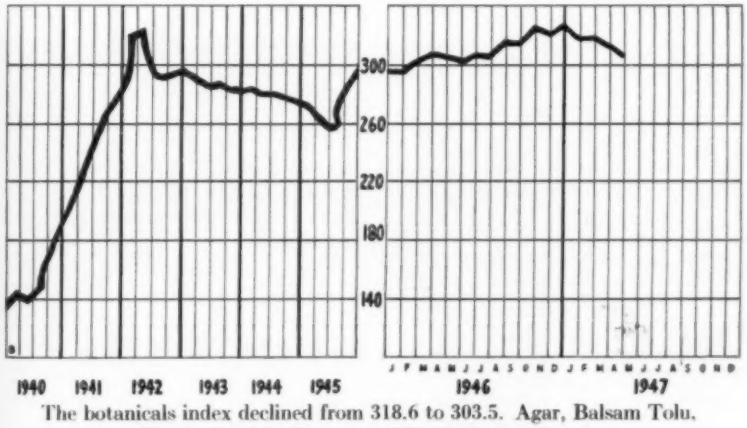
Cut off from facilities for the shipment of vanilla beans, the colonists are leaving the area permanently. According to the newspaper, no pollenization of the vanilla flowers has been done this year. Without pollenization, no crop worthy of collection can be obtained and men, women and children have refused to do the necessary work this year.

Belladonna Tight

Belladonna continues very scarce on spot. Derived products are therefore in

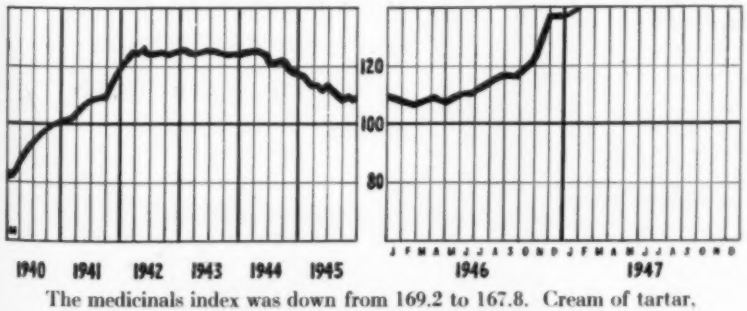
(*Continued on page 705*)

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 318.6 to 303.5. Agar, Balsam Tolu, Ergot, Gentian, Ipecac, and Rhubarb were lower.

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinals index was down from 169.2 to 167.8. Cream of tartar, menthol, and mercury were lower.

IRIDOPHYCIN KALVA* MAY BE THE ANSWER

Two major problems have already been solved . . . What is Yours?

Iridophycin Kalva* is a refined, powdered Pacific Coast Alga which is adaptable to any task currently performed by Irish Moss and capable of many more as well.

The first problem solved by Iridophycin Kalva* was as a stabilizer for holding the cocoa particles in suspension in chocolate beverages.

The second problem solved was in the packing of Chocolate Syrup. Previous to the use of Iridophycin Kalva* the high viscosity syrup formed a thick gel on the cooling apparatus which acted as insulation, seriously impeding the cooling to packing temperature.

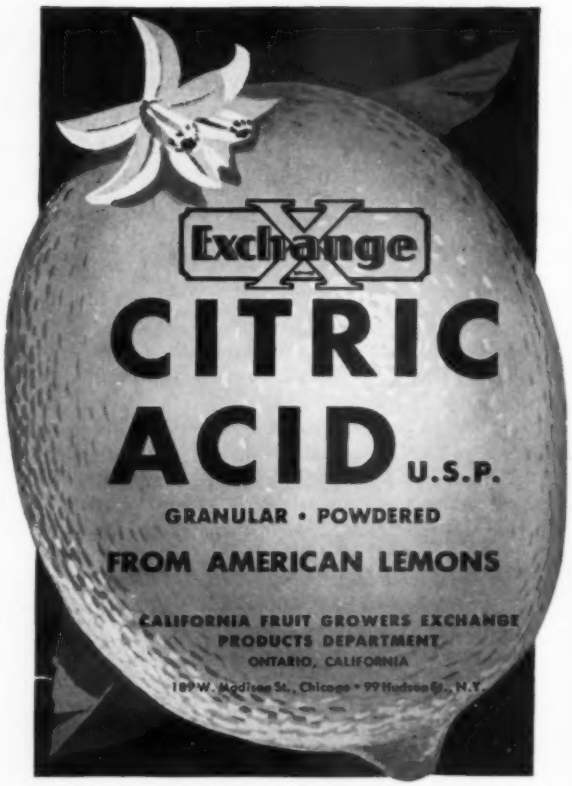
Preliminary work in many phases of the Drug and Cosmetic Industry has shown a good deal of promise.

If you have a problem which might be solved by Iridophycin Kalva* we'll gladly submit a sample.

*Patent applied for.

THE KALVA CORPORATION

222 N. Spring Street — Waukegan, Illinois



FINE AROMATIC CHEMICALS ESSENTIAL OILS and COMPOUNDS

Aromatics Division
GENERAL DRUG COMPANY

125 Barclay St., New York 7, N. Y.

9 S. Clinton Street, Chicago 6
1019 Elliott Street, W., Windsor, Ont.

Lemongrass Oil Drops as Spot Stocks Rise

A very sharp drop in the spot market price of oil of lemongrass was noted as a new minimum quotation of $2.25 was established. A high of $2.90 was still being asked in some quarters, but most suppliers were offering their stocks at close to the inside figure. Losses were being sustained at the new price level, but it seemed apparent that such losses were a necessity as available stocks rose sharply and drove the market down.

Bois de Rose Firms

A report that the export price of bois de rose was being pegged at a high figure in Brazil resulted in greatly increased firmness. The inside price, which had slumped to $3.75 per pound early in the trading period under review, recovered to $4.10. Further increases were indicated in the near future. Reports were received, however, that four separate shipments of shiu oil were on the way from Japan; in view of the fact that shiu oil can replace bois de rose as a source of linalyl acetate, this heavy importation of shiu oil was expected to be reflected in the price of Brazilian bois de rose.

Denatured Alcohol

(*Continued from page 699*)

greater alcohol supplies for the balance of 1947.

A price drop in blackstrap molasses was also recorded during the current trading period, when the United States Industrial Chemicals, Inc., was the successful bidder for 1,800,000 gallons at .264c per gallon—nearly 8c below the record high of 34c per gallon recorded a few weeks ago.

The decline in blackstrap is not expected to affect alcohol prices, however. Processed, the 1,800,000 gallons of blackstrap represents approximately 700,000 gallons of industrial alcohol.

When compared with total United States requirements, 700,000 gallons is an insignificant amount.

More significant are the recent price declines for grains which form the large bulk of raw material for industrial alcohol. Grain prices, while still extremely high, have shown evidence of leveling off in recent trading. Further declines in grain are expected and this is the main hope for alcohol receding from its present high levels.

Belladonna Tight

(*Continued from page 703*)

a similar position. Belladonna extract is reported being imported into this country that ordinarily can supply all of its own requirements. Relief from the belladonna shortage must await on nature, and unless a good crop is produced in Europe this year, this country is almost certain to remain in a condition of insufficient supplies.

It isn't likely that the present tight supply situation existing in belladonna will be corrected by any production from domestic sources this year. During the war, when imports were almost entirely cut off, a number of big botanical dealers contracted with farmers to grow belladonna and sufficient stocks were acquired that way to carry on.

With the ending of the war and the prospects of imports again being resumed, the dealers dropped their contractual arrangements with the growers and set back to wait for the imports. The hitch that has developed in the situation, however, is that the imports have not measured up to expectations. Apparently foreign suppliers are waiting for prices to go up a little before shipping any considerable volume to this country.

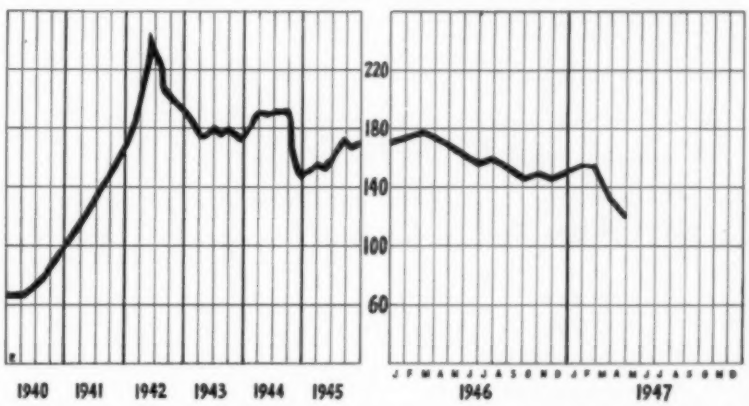
The situation is such that it might be a good gamble for farmers to plant belladonna without a contract with a dealer. If imports hold off much longer, they are almost certain to obtain a good market in this country, but there is no official information available that many growers are planning such a step.

Mercury Down

(*Continued from page 701*)

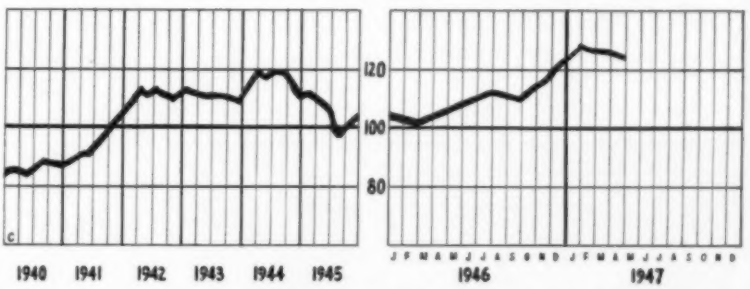
most of this material will be converted into battery metal. There remains some 2900 flasks here which had been imported from Japan earlier in the year. Final disposition of this metal is now yet known, but should this material suddenly appear in the open market it would most likely have a further depressing influence on prices.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined from 136.1 to 131.2. Anise, Bois de Rose, Cassia, Citronella, Clove, Eucalyptus, and Geranium were lower. Bergamot rose to $5.25.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index declined from 131.4 to 128.1. Balsam Peru, Balsam Tolu, Glycerin, Menthol, Stearic Acid, and Gum Tragacanth were lower.

QUALITY RAW MATERIALS

Our complete stocks guarantee that you can obtain the exact grade and quality for your requirements without delay.

BEESWAX, sunbleached and yellow
Refined U.S.P.

TRAGACANTH GUM, all grades

KARAYA GUM, all grades

STEARIC ACID, fancy triple pressed

QUINCE SEED, Persian, recleaned

also

SPERMACETI WAX CERESIN WAX
CAMPHOR

and all other cosmetic raw materials. Samples on request.

Write for latest stock list

WALTER H. JELLY & CO.
INCORPORATED
412 N. Western Avenue Chicago, Illinois

Perfume Bases

MULTIFLOR
B.L.No. 4265
ROSENOL
AZUFLOR

Artistry in Scents

Harmonious compositions producing a *"Symphony in Odour"*.
For Perfumes . . . Colognes . . .
Toilet Waters and Fine Cosmetics.

NEUMANN·BUSLEE & WOLFE INC.
228 W. Huron St. Chicago 10, Ill.

OXYQUINOLINES

(8-hydroxyquinolines)

OXYQUINOLINE
Base
Benzoate
Citrate
Hydrochloride
Salicylate
Sulfate

POTASSIUM OXYQUINOLINE SULFATE

Spot or Contract Delivery

Plant & Laboratory: Lodi, N. J.

B. L. LEMKE & CO., INC.
Manufacturing Chemists
250 West Broadway New York 13, N. Y.

WE SPECIALIZE IN SUPPLYING

HORMONES

in bulk to the ethical, pharmaceutical and cosmetic trades.

QUOTATIONS
UPON REQUEST

INTRAMED CO., INC.
1860 BROADWAY, NEW YORK 23, N. Y.

NOW

"DRUG PRODUCTS" OFFERS PRIVATE LABEL Facilities

Greatly increased manufacturing capacity, new scientific equipment, controlled air-conditioning and skilled personnel enable us to offer these facilities to companies requiring partial or complete private label production.

- **CAPSULES** *(Soft gelatin or slip-type)*
- **TABLETS** *(Coated or uncoated)*

Ampuls **Effervescent Products**
Ointments **Powders**

Write us about your problem today.

THE DRUG PRODUCTS CO., INC.
Dept. DC Passaic, N. J.

Delay No Longer!

Write Today
for
QUOTATIONS AND SAMPLES
of fine

LANOLINS
AND
ABSORPTION BASES

Interesting booklets on Lanolin and Absorption Bases offered without charge. Samples supplied on request.

WRITE, PHONE OR CABLE
Dept. S. F.

THE LANAETEX PRODUCTS, INC.
151-157 THIRD AVENUE – ELIZABETH, N. J.
Telephone: Elizabeth 2-7568 Cable: Lanaetex

ALKALOIDS
GLUCOSIDES---DRUG EXTRACTIVES

The Recognized Domestic Source of Supply Since 1917

ACONITINE
AGARICIN
ARECOLINE
ASPIDOSPERMINE
ATROPINE
BERBERINE
CHRYSAROBIN
COLCHICINE
DIGITALIN
EPHEDRINE
ESERINE
HOMATROPINE
HYDRASTINE
HYOSCINE
HYOSCYAMINE
LOBELINE
OUABAIN
PICROTOXIN
PILOCARPINE
SANGUINARINE
SPARTEINE
STROPHANTHIN
YOHIMBINE

INLAND ALKALOID CO.
MANUFACTURING CHEMISTS
TIPTON INDIANA U. S. A.

POWDERED IRISH MOSS
N. F.
300 lb. BARRELS

CRUDE IRISH MOSS
224 lb. BALES

T. M. DUCHÉ and SONS, INC.
117-119 HUDSON ST., NEW YORK 13

BOSTON 177 State
CHICAGO 61 W. Kinzie
CLEVELAND 16304 LaVerne Ave.
ST. LOUIS 2115 Pine

Amino Acids for Medicinal Use

(*Continued from page 633*)

plotting the balance against intake they obtain a straight line in the region of negative balance and equilibrium, the slope of which is the biological value as defined by Thomas.

In this laboratory, another nitrogen balance method has been used. By successively decreasing the intake of nitrogen, it is possible to estimate the minimum quantity which will maintain the animal in positive nitrogen balance. Since the utilization is governed in part by the amino acid which is present in the lowest proportion to its quantitative requirement, the mixture which comes closest to having an amino acid pattern similar to the needs of the animal will necessarily be the one which will maintain positive balance at the lowest level of intake.

Within the last few years many new methods for estimating the proportions of amino acids present in a mixture have been published. Especially the microbiological procedures hold out hope for more accurate data. This will be another tool to help in evaluating amino acid mixtures when the quantitative requirements become known. However, at least for some time to come it will be necessary to rely on the biological methods.

Actually, the methods listed above, measuring either growth in rats or mice or maintenance of nitrogen balance in man, dogs, or rats, give only part of the story. As an example, in this laboratory it has been found that hydrolysate B is better for maintaining nitrogen balance in adult dogs than hydrolysate A. Yet hydrolysate A has a higher biological value by the Osborne, Mendel and Ferry test (Table II).

TABLE II

	RAT *gm. gain/gm Protein*	*DOG* *Mg. N Req./kilo*
Lactalbumin	3.31	90
Hydrolysate A	2.94	160
Hydrolysate B	2.01	110

Since by one test we are measuring the maintenance requirement and the other, growth requirement, it can be postulated that one hydrolysate is lower in some amino acid such as arginine, which is needed by the growing rat in larger quantities than required by the dog for maintenance. Thus, while these methods give us some information as to the relative worth of various mixtures in experimental animals, no definite conclusions as to what is the ideal mixture are indicated until further knowledge of the requirements of the human being is obtained.

(d) The material should be of known, controlled and low ash content.

In many illnesses, protein deficiency is complicated by kidney damage. The quantity of sodium and total chlorides in such instances must be definitely limited. Also, the edema commonly associated with protein deficiency is not a simple function of low blood proteins. Edema was not common among the very deficient in Europe until they had started to recover. The sodium ion has a greater effect on water balance in such cases than is normal. The edema can be eliminated by a careful regulation of the salt balance. Thus a product of low, known, ash content is desirable.

(e) The material must not contain toxic substances even in small amounts.

Since these products are often given in relatively large quantities, it is highly inportant that no toxic substances be present. Ordinary drugs are given in dosages of milligrams, thus any preservative present is never likely to be taken in large enough amounts to be the least toxic. However, the continued large intake of amino acids containing other agents may lead to chronic toxicity symptoms due to long periods of absorption.

(f) The product should be fairly free from bacteria.

Co Tui has indicated that products containing significant bacterial counts are apt to be poorly tolerated. Again, the large intakes make care in providing reasonably low bacteria counts an attribute, and freedom from pathogenic bacteria essential. The manufacture and distribution of a product takes time. Thus, material which is of good value today, must remain so until it is used. Since these products are excellent bacterial media, they are especially susceptible to spoilage.

(g) The material should have a pleasant taste.

The large variations in taste amongst individuals make it impossible to please everyone. However, great improvement over the characteristic hydrolysate taste should be looked for. The problem of disguising a flavor as strong as that of the present casein hydrolysates is extremely difficult. Even if it is accomplished, the covering taste will grow just as obnoxious in a short time on continued administration.

Most of the amino acids in pure form are very bland or slightly sweet. There are exceptions of course, for glutamic and aspartic acids are used in condiments for their distinctive flavor. It should be possible to make bland mixtures of amino acids which will be nutritively valuable, since none of the essential amino acids has a very distinctive flavor.

In considering a mixture of amino acids designed for parenteral administration, taste is not a factor. However, there are several other rigid specifications which must be met.

Any product no matter what the mode of administration is, must:

(a) Be a good source of the essential amino acids.
(b) Have the amino acids readily available.
(c) Have the proportion of amino acids present such as to be of value in the nitrogen metabolism of the human being.
(d) Have a known, controlled and preferably low ash content.
(e) Not contain any toxic substances.

(*Continued on page 723*)

Hibiscone

for Fixing, Blending, and Stabilizing Perfume

Hibiscone is of equal interest to the perfumer, the cosmetic technician, and the soap maker, to all of whom the completeness, stability, and the lasting quality of perfume is of prime importance. Its pleasing, persistent, and diffusive odor recalls that of natural Musk and Ambrette Seed. Its breadth of applicability, together with other advantages, have placed it in a class by itself. A unique property is its lack of discoloration.

Descriptive matter and samples
will gladly be sent upon request.

VAN DYK & COMPANY, Inc.

Belleville 9, New Jersey

LOS ANGELES 26 1282 SUNSET BOULEVARD

Outstanding

Synfleur Quality

★

RODINOL-SYNFLEUR $32.00 lb.

From finest Geranium Oil

Quality absolutely unsurpassed

Sample upon request.

Synfleur Scientific Laboratories, Inc. *Monticello, N.Y.*

REG. U.S. PAT. OFF.

FOUNDED 1889 BY ALOIS VON ISAKOVICS

ATLANTA · DETROIT · HAVANA · RIO DE JANEIRO · MEXICO, D.F.

NEW YORK CITY EXPERIMENTAL LABORATORY—509 MADISON AVENUE, NEW YORK 22, N. Y.—ELDORADO 5-4757

Industry's Books

Physical Chemistry, by Herschel Hunt, Professor of Chemistry, Purdue University, 610 pp., Illus., Thomas Y. Crowell Co., New York, $4.75.

This text was written in an endeavor to combine sufficient emphasis on the mathematical formulation of ideas, fully explained step by step, with many illustrations and tables of data to clarify the discussions of fundamental principles and facilitate their interpretation. First, by an introduction of thermodynamics in the third chapter it has been possible to make that topic the foundation of later discussions. Second,, rather than have long and difficult gaps in the development of equations, accompanied by a statement that these can be derived by reasoning, each equation is completely developed. Third, the mathematical formulation of ideas has made it possible to eliminate much wordy discussion, a plan that emphasizes the value of logical development in solving scientific problems. Fourth, the text contains an exceptional number of illustrations, averaging one to almost every two pages of text. Fifth, the emphasis laid on practical applications of physical chemistry to other branches of science and engineering shows the intimate relationship existing among all of them.

Chemistry for the Executive, a Layman's Guide to Chemistry, by Ralph K. Strong, Professor of Chemistry, Rose Polytechnic Institute, Terre Haute, 445 pp., Illus., Reinhold Publishing Corp., New York, $6.

It is the intention of the author of this work to present a simplified chemical text for individual study by the layman. Directed primarily at the executive who has a desire to obtain at least a fundamental knowledge of modern chemistry it achieves its purpose of simplification as well as can be expected of so complex and technical a subject as modern chemistry. It covers the chemical elements, oxides, acids and bases, gases and chemical formulas, chemical transformations, solutions and Liquids, Crystals and Solids, The Colloidal State, earthy materials, organic materials, food materials, fuel materials, metallic materials, synthetic materials, and the economic scope of things chemical. At the end of each chapter is a complete list of suggestions for further reading and reference.

Botany Principles and Problems, by Edmund W. Sinnott, Sterling Professor of Botany, Yale University, Fourth Ed., 726 pp., Illus., McGraw-Hill Book Co., New York, $4.50.

The present edition of this text, the fourth since the book first appeared in 1923, includes a considerable amount of additional material. New material includes antibiotics, plant tissue culture, allometric growth, hydroponics, viruses, the use of "tagged" atoms, the genetics of Neurospora, the relation of genetics to evolution, vitamin physiology, and similar subjects. A new chapter on plant distribution has been added. The chapter on Bryophytes has been entirely rewritten by Professor Hempstead Castle, an authority in this field. A final chapter, "Botany and the Future," endeavors to present some of the most active fields of research today and their probable development in the years ahead. Much more attention is given in this edition than in previous ones to the economic importance of various plant structures and products and the families from which they are derived.

The Pharmaceutical Industry, by Robert A. Hardt, Former Vice-President, E. R. Squibb & Sons, New York, Bellman Publishing Co., Boston, 32 pp., Paper Cover, $1.

This monograph is one of a series of seventy five occupational booklets used in connection with guidance activities wherever general counseling work is conducted and for individual reference purposes in the choice of a career. The manuscript for this Monograph was written by a qualified expert and was carefully designed to supply the following authoritative, factual information: Personal qualifications required for engaging in the work. Scholastic training needed. Complete analysis of employment opportunities. Remunerations received. Chances for advancement. Frank statement of advantages and disadvantages. Possibilities for both men and women in the vocation, profession or industry.

A National Labor Policy, by Harold W. Metz, and Meyer Jacobstein, 164 pp., The Brookings Institution, Wash.

This study of the American labor problem, appraises existing labor policies and makes concrete suggestions for appropriate modifications. The general position of the authors is that the collective bargaining process can be made an effective means of adjusting industrial differences and that the public interest can at the same time be reasonably safeguarded.

The Chemical Kinetics of the Bacterial Cell, by C. N. Hinshelwood, F.R.S., Dr. Lee's Professor of Chemistry in the University of Oxford, 284 pp., The Clarendon Press, $6.75.

This book represents the approach of a physical chemist to certain aspects of bacteriology. Alternatively, it presents the simplest kind of living cells to physical chemists as subjects to which their modes of thought may prove applicable. Chemical reactions have long been studied in isolation. The further problem of how they are coordinated for the purposes of the cell is here discussed in relation to the fascinating phenomena of the growth and adaptation of bacteria. Prominence, for example, is given to the physico-chemical interpretation of the extraordinary power possessed by the cells to train themselves to resist drug action.

Personal Hygiene Applied, by Jesse Feiring Williams, M.D., Sc.D., Emeritus Professor of Physical Education, Columbia University, Eighth Ed., W. B. Saunders Co., Phila., $2.50.

Considerable changes have been made in this 8th edition to bring it in line with present knowledge of the subject. Chapters VI and VII are new, the former appropriately discusses Fitness and Exercise, and the latter points up the present interest in Posture, Fatigue, Rest, and Relaxation. Chapter VIII on nutrition is completely revised. The discussion of the endocries has been reorganized and gives a much clearer picture of the role played by these organs in the activity of man. The new material on dental caries, the discussion of aerosols, blood banks, and flood fractionation, the experience of the Air Corps with eye problems, new interpretations of immunity, and numerous other changes of like character appear in every chapter. Everywhere in the book the latest data have been used to show the effect of modern advances achieved by the sciences underlying hygiene.

CRYSTACLEAR
REG. U. S. PAT. OFF.

Makes crystal clear solutions
THAT STAY CLEAR INDEFINITELY
without filtering . . . can be dissolved in distilled water alone or if you wish 25% alcohol can be added. State odor preference.

ALBERT ALBEK, INC.
515 South Fairfax Ave Los Angeles 36, Calif.

NATURAL ABYSSINIAN CIVET

HIGHEST QUALITY

IN ORIGINAL HORNS

Samples and quotations on request

J. C. Andresen
8 East 36th Street, New York 16, N. Y.
Phone: MUrray Hill 3-2393

Ampul Problems

(Continued from page 637)

than formerly, and we are still working on them.

With all the precautions we can take, the ampuls still need to be washed. The best method we have found is to boil the ampuls in a selected detergent for an hour, rinse the outside, eject the detergent and rinse the inside. This method is now in use by one manufacturer and is being installed by others. We have made careful tests of it and find that it produces much cleaner ampuls than are usually obtained. The ampuls can be seen to be clean before filling, and after complete processing show few particles. The rinsing can be carried out on any hand squirter or on a mechanical device such as those on the market. I am not going into detail on this method of cleaning because we have already written it up, and those who do not have a copy of the details may have one for the asking.

After ampuls are washed, they are still subject to some handling in drying, filling, and sealing. It has been found that particles may be knocked off the top of the ampul stem at any of these operations. It is difficult to heavily glaze the top of an ampul stem without closing the opening somewhat. Therefore we have developed an ampul with a funnel shape top. In this ampul the stem opening is the same as in the older type, but the top opening is larger and concentric with the stem opening. The edge of the top opening is well glazed, and it is practically impossible to knock a particle off it without breaking the whole ampul.

Considerable progress has been made in working out the handling of this ampul. It can be washed as usual, using a somewhat longer needle for rinsing. Sealing by hand is simple: usually the top can be grasped in the hand and pulled off while heating the stem. Some adjustments are necessary to mechanical sealers, but a good number have already been sealed on machines.

When we finally have our ampul sealed, the problem of inspection remains. The important points of a shaded light, not too much light in the room, and well trained operators are well known to you. But one point is sometimes overlooked. To detect every particle of small size, say 50-100 microns, requires a certain length of time per ampul. The particle may hang up on the wall, or it may be missed at first glance, or the operator may be distracted by a bubble. It is not possible in commercial inspection to allow sufficient time to detect every particle which a second inspection might find. Therefore if a lot of 1000 ampuls are inspected and 900 pass inspection, it is probable that a second identical inspection will find more rejects in the 900. And a third inspection will find still others.

This is the reason why difficulty is sometimes found in getting agreement between two inspectors. One inspector will miss some particles and another inspector will miss some different ones. Only by allowing unlimited time for each inspection is it possible exactly to reproduce results. I believe the FDA recognizes this point and permits a certain tolerance in particles.

FOR HIGHEST QUALITY
PETROLEUM PRODUCTS
Specify
PENN-DRAKE
WHITE OILS··
····PETROLATUM

White Oils and Petrolatums made by Penn-Drake will provide—*and retain*—the exact properties you specify! Free from acids, alkalies, and other impurities, Penn-Drake *White Oils* offer complete satisfaction, backed by more than sixty years of refining experience.

Penn-Drake *Petrolatums* resist oxidation, light, and heat—are odorless and tasteless, safeguarding the purity and uniformity of your products.

Both of these superb products are available in a complete range of grades and qualities.

penn drake petroleum products

PENNSYLVANIA REFINING CO.
GENERAL OFFICES: BUTLER, PA.
Refineries at KARNS CITY and TITUSVILLE, PA.
Branches: CLEVELAND, OHIO; EDGEWATER, N. J.

Nothing New has been added!

- Only the choicest of the world's crude beeswax goes into it.
- Chemically tested for purity and quality.
- Sun-bleached to a smooth, even-textured whiteness.

BEEHIVE BRAND
Beeswax

And because of its superior quality you can use less and still get a finer finished product. Guaranteed pure . . . Guaranteed always the

Will & Baumer Candle Co., Inc.
Established 1855
SYRACUSE, NEW YORK

Spermaceti Composition | Ceresine Waxes | Red Oil Stearic Acid | Yellow Beeswax Hydistear

ESSENTIAL OILS
AND
AROMATIC PRODUCTS

Our Selection of the Month

EFFICIENCY · RELIABILITY

DANUBE

- A fabulous All-Purpose Perfume base which is subtly exciting and long lasting. (Trial Pound $10.00)

May we also call your attention to three other exquisite perfume compounds . .

LAVENDER #3
CHYPRE #56
TUBEROSE #324

LEMONGRASS REPLACEMENT...
Scientifically produced Oil which possesses the character of the original at a fraction of the cost.

- *Wire, 'phone or write . . .*

Try us for quality, price, delivery, service. In addition to being direct importers, we also compound various standard and special items. Try us!

EDWARD REMUS & CO., Inc.
11 WEST 42nd STREET · NEW YORK 18, N. Y.
Cable Address: EDSUMER, NEW YORK
Mid-Western Office
806 DELAWARE ST. · KANSAS CITY 6, MO

KOMMON SCENTS!

Big League baseball comes as a relief from political bickering. It's a pleasure to hear about brawls and strikes that aren't blamed on Communists.

•

The new season opened with an upset of tradition. Before President Truman tossed out the first ball, ex-Senator Chandler threw out the first manager.

•

Season's loss of Leo Durocher is the greatest shock in Brooklyn since the public schools made English compulsory.

•

The Dodgers without Durocher are as frustratingly incomplete as baseball without the Dodgers. It's like mentioning Truman without Roosevelt, to use a parallel in opposites.

•

There's something heartwarming in going out to the ball park during business hours and seeing your office boy sitting a couple of rows ahead. Isn't it wonderful that his grandmother didn't really die on Opening Day!

•

Then, there's always the thrill of new faces in new seasons. Bing Crosby, for example. Many believe he influenced Hank Greenberg's change of plans. After all, how often can you get a boss sufficiently talented to sing duets with Al Jolson?

•

We're not overlooking an equally cogent reason for Greenberg's decision to play for the Pirates: He'd rather rap homers for Pittsburgh than parcels for Gimbel's.

•

And Bob Hope's stake in the American League Indians practically guarantees that his next movie will be called, "The Road To Cleveland." Hope's investment isn't exactly risky. But if anything happens to Bob Feller's arm, the first Bob will have to change the movie's title to, "The Road to Ruin."

•

Unlike football, baseball does not start each season with myriad rules changes. But with the current Congressional hysteria, we may expect to see a new position created, Deep Shortstop. Actually, this will be only a change of name. It's designed to appease conservative baseball fans who cringe at the word, Left-fielder.

•

Baseball and Cosmetics! How much these industries have in common! Each outfit hopefully opens the new season as a potential winner. And by July Fourth we're all chorusing:

"Wait 'till next year!"

George Fiedler

K

KELTON

Cosmetic Company

230 West 17th Street
New York 11, N. Y.

763 So. Los Angeles Street
Los Angeles 14, Calif.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance

The only way one can secure an exactly reproducible inspection is to use a mechanical device which is extremely fast in its operation, and not subject to fatigue. Such a device would detect every particle at every inspection. It would not have to reject every ampul in which a particle was detected because the passing level can be set wherever desired. Attempts have been made in the past to develop such a device, and RCA are working on one now. Pending such a development, it is possible to give a super inspection to parts of various lots to determine what is the exact level of quality. In such an inspection, unlimited time is allowed.

Modern Ointment Bases

(Continued from page 631)

People[26, 25] who have worked with these bases have found that ointment made with them and containing fairly high amounts of water are sensitive to temperature changes. They feel that these bases are more suited to the extemporaneous preparation of small amounts of ointments rather than to the production of stock ointments.

The current trend is toward the wider use of "washable," oil-in-water emulsified bases and there are many reasons for this preference. With a number of representative preparations closely approaching the ideal, such ointment bases are generally of excellent texture, easily applied, mix readily with serious exudates, are non-congestive, and easily removed with water or soap and water.[25] Recommended as carriers for a wide range of medicaments, such bases are very frequently used as vehicles for sulfa drugs, penicillin, and other antibacterial agents. Many investigators have found that antiseptics provide better therapeutic action when dispensed in oil-in-water emuslion bases. In general, because of the greater penetrating power of these modern ointment bases, the drugs incorporated in these vehicles will exert a much stronger action.[12] Hence, as compared to the quantity normally required in greasy bases, smaller amounts of medicaments usually suffice when oil-in-water emulsion bases are used.[19] However, such preparations are liable to deteriorate as a result of mold growth or loss of moisture unless a preservative and tightly closed containers are used.[20]

Many kinds of emulsifying agents have been used for making these bases. Among them are soaps, sulfated oils, various wetting agents, many fatty acid esters, and certain higher fatty alcohols. With these emulsifiers, numerous formulas have been developed and tested during the last few years. Because so many variations are possible, attempts[18] have been made to devise a general formula. Perhaps the most indicative is that proposed by Prinz and Ereaux.[12] In their opinion a modern ointment base will contain: (a) One-half to 4 per cent of a suitable wetting agent; (b) 10 to 40 per cent of one or several of the emulsifying agents, such as the esters of fatty acids or fatty alcohols, plus any oil desired; (c) 5 to 10 per cent of glycerine as an anti-

drying agent; and (d) the rest being water. The general procedure for making the creams is as follows: The emulsifying agents and oils are melted with any oil-soluble ingredients which are to be incorporated; while the wetting agent is dissolved in the water together with the glycerine and any water-soluble ingredients. The aqueous portion is heated to the same temperature as the fats and is poured slowly into the latter with stirring; the mixture being stirred until cold. With some emulsifying agents the oil and water phases may be heated together, while others produce stable emulsions without heating.

Brief consideration of the various types of emulsifying agents will provide further information. Soap has long been used for preparing solid emulsions. Often, as in the case of stearate vanishing type bases, the soap is formed *in situ* on mixing the aqueous and oily phases. Because these emulsions may hydrolize and give an alkaline reaction, and because of certain incompatibilities, triethanolamine was tried as a saponifying agent to replace the usual alkalies showing certain improvements over bases made with soda and potash soaps,[29] nevertheless triethanolamine creams retain the incompatibilities of ordinary soaps.

Another approach was made when sulfated oils, especially sulfated castor oil, were "borrowed" from industry and used as emulsifiers and wetting agents for pharmaceutical and cosmetic products. A further modification, yielding sulfated hydrogenated castor oil ("SHCO") or hydroxystearin sulfate, provided a material useful for making ointment bases with properties superior to official substances.[30] One such base, given below, was used as a vehicle for several antiseptics and was found[31] to give results equal to or better than those obtained with official ointments:

Diethylene glycol monostearate	**10 Gm.**
Sulfated hydrogenated castor oil	**20 "**
Petrolatum	**30 "**
Water	**40 "**

An important advance in the production of improved oil-in-water ointment bases came with the introduction of the newer wetting agents.[32] A large number of such substances are available commercially, but not all of them are suitable for dermatologic purposes. Because of their powerful surface action, certain of these wetting agents have been employed as emulsifiers in many of the recently developed emulsion type ointment bases.[2, 29]

One major group comprises the sodium salts of the sulfated higher fatty alcohols. The most important members are the sodium salts of sulfated lauryl, cetyl, stearyl and oleyl alcohols, and are generously called sodium lauryl sulfate, sodium cetyl sulfate and so on. Although fairly pure compounds are available, most commercial products are mixtures of several of these compounds with one member generally predominant. Efficient in low concentrations, they form emulsions of the oil-in-water type which are practically neutral, resistant to the action of acids, alkalies and electrolytes

FOR THE COSMETIC TRADE

Unusual handling, conditioning and milling techniques make these raw materials for cosmetics the finest obtainable.

▼

ACACIA GUM
ARABIC GUM
BENZOIN GUM
HENNA
KARAYA GUM
LAVENDER FLOWERS
MYRRH GUM
ORRIS ROOT
QUINCE SEED
ROSEBUDS
SANDALWOOD
TRAGACANTH GUM

▲

Write for your copy of our complete 1947 price list, soon off the press

R. J. PRENTISS & CO., Inc.
110 WILLIAM STREET, NEW YORK 7
9 SO. CLINTON STREET, CHICAGO 6

WH&C
Specialties
for the DRUG and
COSMETIC industries

VODOL
The CORN OIL LECITHIN

IF you can use Lecithin in your products, you'll certainly be interested in VODOL—the remarkable Lecithin derived solely from corn oil.

In vitamin preparations, as little as 0.1% VODOL

- helps maintain potency — by retarding oxidation
- inhibits rancidity
- stabilizes flavor and consistency

VODOL is also recommended for cosmetics, ointments, and mineral oils. Its addition inhibits oxidation and rancidity, lowers interfacial and surface tension, and has a softening effect on the skin. Write today for literature, samples, and prices.

★ ★ ★

Other WH&C Products
CHLOROPHYLL
CAROTENE
FATTY ACIDS
LANOLIN
PETROLATUM
MAYPONS
ANIMAL and VEGETABLE OILS
SYNTHETIC ORGANIC DETERGENTS
and many other chemical specialties

SINCE 1838

Welch, Holme & Clark Co., Inc.
serving the industry for over a century
439 WEST STREET
NEW YORK 14, N.Y.

and, to a certain extent, even to heating and freezing.[12]

Sodium lauryl sulfate is undoubtedly the best known member of the group in this country. In England, a product called Lanette Wax SX has found wide acceptance as an efficient agent for making excellent oil-in-water emulsions for both cosmetic and dermatologic use.[33, 34] It is described as a partially sulfated or phosphated mixture of cetyl and stearyl alcohols. A preparation with very similar properties may be prepared from:[35]

Cetyl alcohol flakes	**9 parts**
Sodium lauryl sulfate	**1 part**

Another group of compounds, said[12] to have even stronger wetting properties, comprises the esters of sodium sulfo-succinate, of which the diocetyl ester ("Aerosol OT") is the best known. Very soluble, but slow-dissolving in water, diocetyl sodium sulfosuccinate is also soluble in oils, fats, waxes and similar organic substances when heated to above 75° C. Its compatibility with electrolytes depends on the nature of the electrolyte and its concentration,[36]

The fatty acid esters of glycerine and the glycols form a group of compounds that have found very extensive use in the preparation of bland, stable, washable, highly compatible ointment bases. The pure esters are not effective as emulsifiers unless a suitable proportion of another surface active agent is present. Hence many of the commercial esters are mixed with from 5 to 10 per cent of soap, generally potassium stearate, or other substance to produce efficient "self-emulsifying" esters.

Glyceryl monostearate is probably the most familiar and most widely used ester and numerous formulas have been developed with this substance as the emulsifying agent.[36] However, literally scores of effective fatty acid esters of the polyhydric alcohols are available commercially. In addition fatty acid esters of sugar alcohols, like sorbitol and mannitol, have been prepared recently and have proved themselves highly useful for preparing ointment bases.[37] Thus there is available a wide range of esters with varying properties which permit the selection of a compound most suited to a particular need.

This very abundance, however, is liable to lead to confusion. Hence the significance of the findings of Fiero and Dutcher[38] following the preparation of ointment bases using forty-five different polyhydric alcohol esters. As a result of their work, the following compounds were found to produce superior ointment bases: diethylene glycol monopalmitate and monostearate; glyceryl monolaurate, monomyristate, monopalmitate, monoricinoleate and monostearate; propylene glycol monostearate; propylene glycol glyceryl monostearate, and sorbitol distearate.

Higher fatty alcohols, particularly cetyl alcohol and stearyl alcohol, have found an established place in ointment base formulation. Serving as excellent auxiliary emulsifiers, these alcohols are particularly desirable in ointments because their presence not only in-

creases the stability of the emulsions[39] but also imparts a smooth and "velvety" feeling on the skin.[12, 40] The employment of one such alcohol is illustrated in the following widely useful, washable, hydrophylic ointment proposed[41] for inclusion in U. S. P. XIII.

Stearyl alcohol	**250.00 Gm.**
White petrolatum	**250.00 "**
Glycerine	**120.00 "**
Sodium lauryl sulfate	**10.00 "**
Methyl parahydroxybenzoate	**0.25 "**
Propyl parahydroxybenzoate	**0.15 "**
Distilled water	**369.00 "**

New materials are constantly being added to the list of substances useful for making ointment bases. One group of compounds that has attracted considerable attention recently are the polyethylene glycols, sold under the name, "Carbowax" compounds.[42] Available as wax-like solids, the fact that these compounds are water-soluble, bland, non-volatile and unctuous makes them quite appropriate for making dermatologic ointments. Found to be non-irritating to the skin,[43] the Carbowaxes have already found a number of applications in preparations for treating skin disorders.[44, 47] Carbowax 1500 is considered especially suitable because of its petrolatum-like consistency. Since it liquefies easily and leaves a somewhat sticky feeling on the skin, Hopkin's[48] has recommended that it be combined with harder Carbowax 4000 to prepare ointments of any desired consistency. This investigator has also provided other valuable data on these materials.

BIBLIOGRAPHY

1. Lesser, M. A.: Drug & Cosmetic Ind. 44:33, 1939.
2. Lane, C. G. & Blank, J. H.: Arch. Dermat. & Syph. 54: 497 & 650, 1946.
3. Eller, J. J. & Wolff, S.: Arch. Dermat. & Syph. 40:900, 1939.
4. Harry, R. G.: Manuf. Chem., July 1940 p. 184.
5. Strakosch, E. A.: Arch. Dermat. & Syph. 47:16, 1943; 47:216, 1943; 49:1, 1944.
6. Beutner, R., Calesnick, B., Powell, E. & Bortin, L.: J. Lab. & Clin. Med. 28:1655, 1943.
7. Walzer, A. & Sack, S. S.: Arch. Dermat. & Syph. 49:427, 1944.
8. Johnston, G. W. & Lee, C. O.: J. A. Ph. A., Scient. Ed. 32:279, 1943.
9. Neuroth; M. L. & Lee Co.: J. A. Ph. A., Pract. Pharm. Ed. 6:285, 1945.
10. Chamings, A. R. G.: Pharm. J. 154:276, 1945.
11. Pillsbury, D. M. & Shaffer, B.: Arch. Dermat. & Syph. 39:253, 1939.
12. Prinz, M. V. H. & Ereaux., L. P.: Canadian M. A. J. 47: 344, 1942.
13. Harry, R. G.: Brit. J. Dermat. & Syph. 54:1, 1942.
14. Le Mar, L. E. & White, A. J.: J. A. Ph. A., Scient. Ed. 33:134, 1944.
15. Sulzberger, M. B., Baer, R. L. Kanof, A. & Lowenberg, C.: J. Investig. Dermat. 7:227, 1946.
16. Redgrove, H. S. Manuf. Chem. 13:130, 1942.
17. Anon.: J. A. Ph. A., Pract. Pharm. Ed. 2:467, 1941.
18. Grace, A. W.: Conference on Therapy, New York State J. Med. 44:502, 1944.
19. Witt, M.: Australasian J. Pharm. 27:618, 1946.
20. Anon.: Am. Prof. Pharm. 11:236, 1945.
21. Gibson, A. J., Parker, H. E. & Almus, A.: J. A. Ph. A., Scient. Ed. 30:196, 1941.
22. Lesser, M. A.: Drug & Cosmetic Ind. 58:786, 1946.
23. Lower, E. S.: Manuf. Chem. 14:231 & 283, 1943.
24. Chamings, A. R. G.: Pharm. J. 157:134, 1946.
25. Hughes, F. N.: Canadian Pharm. J. 77:945, 1944.
26. Johnston, G. W. & Lee, C. O.: J. A. Ph. A., Scient. Ed. 32:25, 1943.
27. Anon.: J. A. Ph. A., Pract. Pharm. Ed. 6:365, 1945.
28. Johnston, G. W. & Lee, C. O.: J. A. Ph. A., Scient. Ed. 29:236, 1940.
29. Atkins, F.: Pharm. J. 152:252, 1944.
30. Fiero, G. W.: J. A. Ph. A., Scient. Ed. 30:145, 1941.
31. Fiero, G. W. & Loomis, T. A.: J. A. Ph. A., Scient. Ed. 34:218, 1945.
32. Duemling, W. W.: Arch. Dermat. & Syph. 43:264, 1941.
33. Allen, C. H.: (through) Drug & Cosmetic Ind. 50:77, 1942.
34. Bamber: Brit. J. Dermat. & Syph. 52:21, 1940.
35. Baker, W. B.: Drug & Cosmetic Ind. 54:283, 1944.
36. Green, M. W.: Bull. Nat. Formulary Comm. 14:97, 1946.
37. Presslie, R.: Pharm. J. 157:185, 1946.
38. Fiero, G. W. & Dutcher, M. W.: J. A. Ph. A., Scient. Ed. 34:56, 1945.
39. Kalish, J.: Drug & Cosmetic Ind. 37:595, 1935.
40. Goodman, H.: Arch. Dermat. & Syph. 45:1101, 1942.
41. Zopf, L. C.: J. A. Ph. A., Pract. Pharm. Ed. 6:365, 1945.
42. McClelland, C. P. & Bateman, R. L.: Chem. & Eng. News 23:247, 1945.
43. Dodd, M. C., Hartmann, F. W. & Ward, W. C.: J. A. Ph. A., Scient. Ed. 35:33, 1946.
44. Landon, F. W. & Zopf, L. C.: J. A. Ph. A., Pract. Pharm. Ed. 4:251, 1943.
45. Keeney, E. L.: Med. Clin. No. Am., March 1945, p. 323.
46. Clark, W. G.: Am. J. Med. Sci. 212:523, 1946.
47. Draeger, R. H. & Pijoan, M.: J. A. M. A. 128:1096, 1945.
48. Hopkins, J. G.: J. Investig. Dermatol. 7:171, 1946.

MIRANOL
TRADE MARK

SYNTHETIC ORGANIC DETERGENTS

FOR

- Bubble bath preparations
- Clear, soapless shampoos
- Cream shampoos—tube and jar types
- Soap shampoos
- Shaving creams
- Tooth cleaning preparations
- Liquid hand soaps

In addition, we have products particularly adapted to making a wide variety of household and industrial cleaners. Our line also includes industrial detergents and wetting agents for use in the textile, paper, rubber, metal and other industries.

Miranol Synthetic Organic Detergents are standardized to definite wetting out, detergent and foaming specifications. Immediate shipment can be made from distributor stocks in principal cities. Samples and prices on our new, improved 1947 production now ready. Write for them and a copy of our new booklet, A 11, which gives complete specifications on all products and their suggested applications.

Canadian Distributor
Charles Albert Smith, Ltd.
123 Liberty St., Toronto 3, Ontario
315 Youville Sq., Montreal, Quebec

Export
Callan, Simon & Norton, Inc.
21 West St.
New York 6, New York

Miranol Chemical Company, Inc.
2 FORD AVE. MILLTOWN, N. J. — PHONE: MILLTOWN 6-0754
PLANTS AT CHICAGO, ILLINOIS AND MILLTOWN, N. J.

Jasmine
Supreme

from

TOMBAREL FRERES,
Grasse

the same Dependably
Fine Product as Always,

IS AGAIN AVAILABLE

Since supplies are somewhat limited, we suggest early anticipation of your needs.

ALSO AGAIN AVAILABLE

CASSIE SUPREME

ORANGE FLOWERS SUPREME

ROSE SUPREME

TUBEROSE 22

ORRIS CONCRETE

OAKMOSS PRODUCTS, etc.

Call on us for expert help with your perfume problems.

Tombarel

PRODUCTS CORPORATION
L. J. ZOLLINGER, PRESIDENT
12 EAST 22nd STREET, NEW YORK 10
CHICAGO—A. C. DRURY & CO., INC.
219 EAST NORTH WATER STREET

Cooperative Advertising

(Continued from page 625)

advertising of the prestige stores. Neither class nor mass in public or retail recognition, it can furnish broad consumer contact for the manufacturer who feels obliged to restrict magazine advertising to fashion magazines. In addition, effective or competitive units of space make for reasonable cost and the dual reader interest of men and women is of added interest.

Since cooperative advertising is a mutual benefit between store and manufacturer, and largely a question of individual bargaining, it is interesting to examine the retailer's benefit in this advertising. Particularly since at this time many retailers seem to feel that they are bursting with kindness in letting the manufacturer pay all and do all in this partnership.

A retailer's viewpoint of cooperative advertising may include:

1. Leading stores want new introductions with prestige, or fashion reputation, to help hold community leadership, help traffic. For secondary stores such as introduction may be a scoop—that's one way to climb.
2. Stores want well planned promotions of good sellers to help sales and traffic.
3. Only a small fraction of sales are derived from current advertising. But the accumulating effect, the variety of advertising news, is essential in building store traffic. Cooperative advertising is a valuable contributor to store traffic.
4. The store's advertising rate depends on the volume of linage. Manufacturer's linage helps here.
5. Friday and Saturday are big days for most stores and advertising tends to bulk for these days. But stores want continuity of advertising and traffic stimulation on other days. Manufacturers help here, too.

It must be remembered that stores are offered a great deal of advertising money that they do not want and should not accept. For instance:

1. Products which the store may be willing to stock but not publicize in connection with the store name, because the price or character of the product is out of line.
2. Where the sales record, or estimate of potential sales do not warrant special attention. This is particularly true of stores where there is some system for alerting the sales force to current advertising.

It may be easier to understand one phase of mutual or conflicting interest in this form of advertising if expressed this way.

The farther a store is from leadership, or the fashion center, the more valuable to the store and less valuable to the manufacturer is the cooperative advertising of a favored, prestige product. The reverse, of course, is true also. It is for this reason that large sums for advertising are assiduously urged on leading stores. And

these stores are thoroughly aware of the manufacturers' reasoning.

There is probably no more effective instrument for expanding distribution than the cooperative newspaper advertisement which joins in sales partnership the name of a nationally famous store and a manufacturer's brand. It signs a public approval of this admired store for all other retailers to note. The portfolio of a salesman for a new or growing perfume or class cosmetic line would hardly be complete without proofs of a Fifth Avenue or State Street store, with representation from the coast and other key cities. In fact, there are few cosmetic manufacturers using selected distribution so well entrenched, with so heavy an investment in magazines, that some application of this superior sales strategy would not help. And when you consider the concurrent advantage of establishing a pattern of distribution that lends distinction to the product, then the advantage to the manufacturer would seem conclusive.

If newspaper cooperative advertising holds these strategic advantages for the manufacturer, we can say also that it has largely unused tactical advantages in the field. This form of advertising takes its place naturally in seasonal and general promotions; to varying degrees, depending on the store, it produces extra store effort and interest. But perhaps one of its chief values, in the hands of an alert salesman, is the opportunity it gives, when backed by an idea, of meeting store executives. The coordination of promotion and advertising, in most stores, involves buyer and merchandise manager, advertising manager, and in some stores fashion coordinator, interior and window display manager.

For these reasons it would seem that responsibility for cooperative advertising, within certain budget and policy limitations, should be in the sales department.

Only an intimate acquaintance with the retail trade, that can appraise the character, personality and influence of the individual store, or that understands the clash of these personalities should determine this basis of retail cooperation.

Cooperative advertising is individual bargaining. There are many mutual, some clashing interests. It offers the manufacturer broad strategic opportunities, local tactical advantages. Both sides know pretty thoroughly the rules of the game. It takes real competence to get the true rewards in newspaper cooperative advertising.

Modern Creative Merchandising

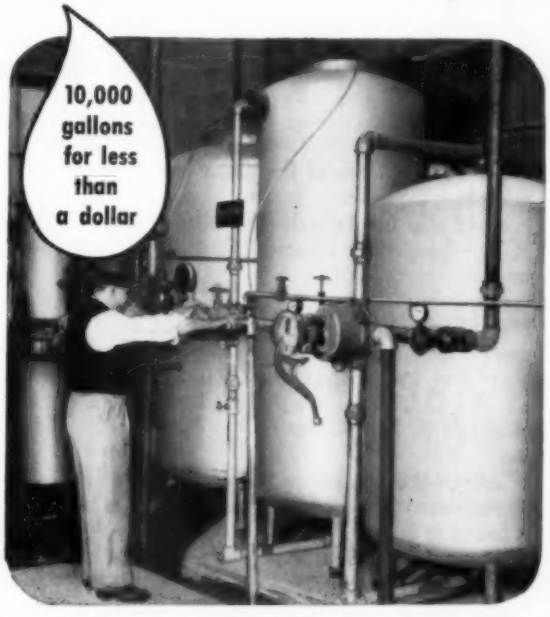
(*Continued from page 628*)

advice of your well, or less well meaning friends, the mood of your husband, or the authoritative command of your growing-up daughter.

It will always be a miracle to me, that a product finally arrives from the creator's brains to its final destination in the consumer's life. It does however, and merchandising puts it there. Let's see what steps it has to take and the means to take these steps. I will climb

De-ionized Water

...all the advantages of distilled water at a fraction of distilled water's cost!



ANOTHER ILLCO-WAY INSTALLATION: Pure water is produced by this compact ILLCO-WAY De-ionizer (flow rate: 900 gph) at American Central Division—Avco Mfg. Corporation, Connersville, Indiana. No fuel, no cooling water required.

If your manufacturing process could be improved by pure water, but the cost of *distilled water* is prohibitive—modern ILLCO-WAY De-ionizers are the solution!

You can obtain pure water—in volumes up to 500,000 gallons an hour—*at 1% to 10% of the cost of distillation!*

Hundreds of pharmaceutical, ceramic, cosmetic and other industries are obtaining pure water from compact ILLCO-WAY equipment such as illustrated above. Units are specially engineered to meet your needs. *Write for latest literature.*

ILLINOIS WATER TREATMENT CO.
847-5 Cedar Street, Rockford, Illinois
7310-E5 Empire State Bldg., New York City

TESTED IN THE LABORATORY
ILLCO-WAY
PROVED IN THE FIELD

Ion-exchange Engineering

Treatment of Sugar, Liquid Sugars, etc., Purification of Industrial Wastes; Treatment of Boiler Feed-Water; Purification of Process Water; Reclamation of Valuable Constituents

HILARY SAYS:

A "FIRST-CLASS-STINK" — could be entirely composed of words and verbs—and be quite personal! It might be swell entertainment for non-participating members, known as Innocent By-Standers. Writing about it might delight the printer's heart and amuse some readers— but contain expressions not allowed by United States Postal Regulations and offend the ethics and morals of general publishing practices.
It could also be the ugly after-note of heptyl aldehyde (C 7),—from which all amyl cinnamic aldehydes must be made.

AFTER cooking in my little pot—and stewing a bit—an amyl cinnamic aldehyde was reprocessed and redistilled. Now that the soup is ready for serving,—it's called FLASOLEE. The ugly chemical after-note of heptyl aldehyde (C 7) is eliminated.- - - Plenty fine!

PERFUMES that have a flowery note mostly all contain amyl cinnamic aldehyde. FLASOLEE has a "waxy" note, as found in Jasmin Absolute;—it also has a "green" note. What more do you want? With two notes, make a notation: It has greater strength than "regular" amyl cinnamic aldehyde;—and it's smoother and more flowery. Make another note (or tie a string around your finger): Try FLASOLEE in any flower-compound, substituting it for a regular amyl cinnamic aldehyde;—try it, say, in a Jasmin Compound. (Min will say "Jas"—and come to life!) It's yoost good schtuff!

SAY,—I gotta go,—an' when I gotta go,—I GOTTA GO! But I'm not headed to where some tough guys told me I could go, when I asked 'em to stop shooting paper-spit-balls at the old lady crossing the street. I have to cross the border to see some of our Good Neighbors in Mexico City and Havana, Cuba.

BUT don't worry: Any orders for FLASOLEE will gladly be taken and promptly handled—during my absence (—and even when I get back!)

AFTER the Caribbean business—(maybe I'll bring a present for you when I return)—I have to celebrate!—Well? Wouldn't you—on your 18th Honeymoon—with the same wife? Yowsah! For 18 years she's put up with all my smells and yells. So—we're going to spark a bit in Miami Beach and raise a fine fuss.

DON'T you fuss! If you want a fine flowery compound, —raise it to the highest point with FLASOLEE.

J. HILARY HERCHELROTH

representing

Crespi Martinenq — Established 1782 — Grasse, France
369 Third Avenue — New York 16, N. Y.
In Havana: Lainz y Cia Aguiar 615

them first to a first floor containing an idea, the product, the package, then to a second floor with timing, pricing market-testing, to a third floor with promotion, advertising, displays, publicity, and to a fourth and last floor with wholesale and retail distribution.

A basic idea is of course the most important. It may start with a name, a design, a new product. It may be entirely new, an item that people never heard of, that people never knew they needed, that people may not even need until they are persuaded that they do. These are the most difficult to promote, the most controversial, the most abused and attacked; such were the automobile, the airplane, the electric light, for instance, and their numberless ramifications.

But the beginning of these inventions is so far back in the past, that few of us believe now, that they did not become real consumer goods until the merchandiser took them in his hands.

A more recent instance is a plastic material which as an invention is just a hunk of undistinguished looking matter, but through the efforts of the merchandiser it becomes decorated shower-curtains, raincoat fabrics, upholstery materials superior to leather and curtain fabrics, which you can wipe off with a wet sponge instead of washing. When, through large consumer acceptance and larger production, the price of these fabrics will come down to a cheaper level we will see an instance of producing an old necessity in a novel, superior and more economical way, the usual process in our industrial age.

We can symbolize this in the following equation: $(P \times M)\, D = S$ where P is price, M the merchandise unit, D the demand, S sales.

$\vee \quad | \quad \wedge \quad \wedge$ Merchandising, promotion, advertising will create a greater and greater demand, which we express in this

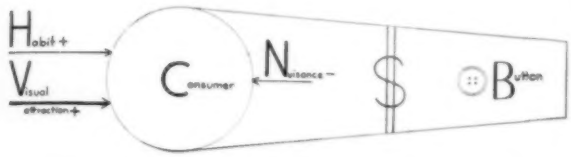
equation: $(P_{Po} \times M)\, D_A = S_{Po}$

Where D_A is the demand created by advertising and right merchandising, S_{po} is potential sales, P_{po} is the potential price as manufacturing costs come down with mass production. The following relation will exist between the two equations: Price will become lower, Demand higher, Sales higher, while the merchandise remains the same.

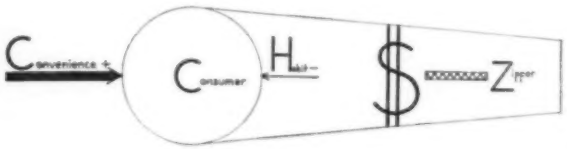
Another example of a new invention which will do a job better than the old one would be the zipper. The zipper should have displaced the button a long time ago, exactly as the automobiles replaced the horse and buggy. One of the reasons it did not, is, that you could not launder it; but now zippers are made of plastics and are as easy to wash and iron as traditional buttons whatever they are. Now it is the job of merchandisers

to put the zipper really across, but also it is their job to keep buttons on the market by proving exactly the opposite from what the zipper guys will prove. The ensuing battle royal will engage all the high sounding words one can find in the dictionary, the aid of fashion experts, shiny paper magazines, testimonials, market-curves, and photographs of glamorous blondes.

As all battles call for strategists and all strategists have to draw maps and diagrams, I want to show the merchandiser how to become a great general, using Professor Kurt Lewin's symbols to determine psychological behavior.



Consumer C wants to buy button B. The main psychological barrier is the price of the button. The field-forces H = habit and V = visual attraction, beauty, decorative possibilities, work to overcome the barrier, the negative force N = nuisance fights against it.



Consumer C wants to buy Zipper Z. The price barrier is bigger, because it is more expensive than the buttons. The habit vector is reversed. Habit prefers the button. But an important vector represents a new force, CO for convenience. CO is certainly stronger than H and V in the first diagram. Therefore, if the price barrier is not too strong, the zipper will win.

The museum of Modern Art proved how silly buttons are, and thanks to the gradual disappearance of waistcoats and the introduction of the zipper, we happy males do not have to take care of 63 buttons on one set of clothes any more, but only 49. You know on which side my sympathies are.

You could also follow the evolution of razors, which is still in full swing, from oyster shells to cocoa-nut-shells, from pumice-stone to steel blades, the invention of safety razors, the merchandising of electric razors. The merchandising battle includes such elements as old Toledo sword-blades, scientific cutting diagrams, glamorous pictures of streamlined instruments which look like miniature vacuum cleaners, which in turn look like miniature locomotives!

Now what would happen if all of a sudden a new era could bring forth a renewed fashion of beards and mustaches? A mad scramble to rush to the market ointments, and waxes and clippers and curlers, which would have been unsalable before.

This brings us to the very important element of timing. It is elementary, that we will not put on store

The most discriminating manufacturers of cold wave solutions say that **EXTRACTED THIOGLYCOLIC ACID** (ammonium thioglycolate) guarantees less odorous and faster acting solutions than any other form of thioglycolic acid. Noteworthy too, are claims of greater stability and lovelier, tighter ringlets.

STANTON'S AMMONIUM THIOGLYCOLATE is sufficiently moderate in price to permit you to afford this superior material for your cold wave solutions. Always delivered according to Stanton's guaranteed specifications, or better, our **EXTRACTED THIOGLYCOLIC ACID** will solve your many problems connected with this important product for the beauty industry.

For greater eye-appeal, increased sales, use our stable emulsifiers to "cream" your solution.

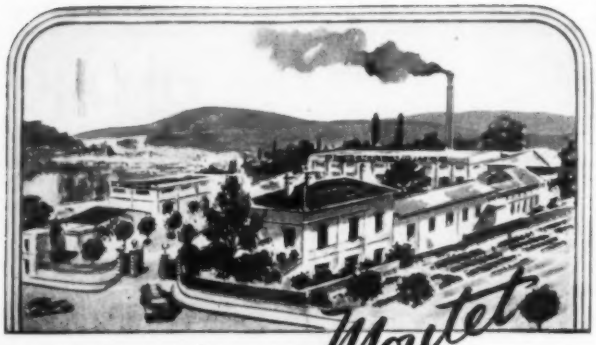
EXPORT BROKERS INQUIRIES INVITED

STANTON LABORATORIES

STANTON LABORATORIES, INC.

227 Krams Avenue, Philadelphia, Pa.

(Plant & Main Office)



J. Henri Moutet

USINE ST. CLAUDE

GRASSE

FLOWER OILS

ESSENTIAL OILS

AROMATICS

for the

SOAP • PERFUMERY • COSMETIC
and ALLIED TRADES

Laboratories, Distilleries and Head Offices:
GRASSE • A. M. FRANCE

shelves suntan-oils and bathing suits in mid-winter, except for the lucky few, who will take them to warmer spots, but don't forget that the store buys far in advance, and the manufacturer has to have time to produce.

Nobody experienced in merchandising cosmetics would deny the primary importance of the product inside the package. A beautiful container will sell once, to sit on the customer's dressing table in untouched splendor, unused, and never bought again. Volume is built and kept up by repeat sales. And only what is in the container and what the consumer really and faithfully uses, will produce that.

The package has nevertheless a great deal of importance. It has to tell a story in itself. It has to express the character of its contents, whether it is food, perfume, machine-parts or something else; it has to tell the name of its producer and remind you of his other products. A prominent package designer lately arrived at the conclusion, that the three sides of a one pound tea package represents one million dollars worth of newspaper advertising space for 100 million tea packages. That is a lot of tea but also a lot of money.

According to a chain store sales promotion director, 87 per cent of their customers buy through attraction of sight.

Though the great American customer spent between 120 and 130 billion dollars for consumer goods and services in 1946, he did not spend it indiscriminately. To test this enormous market is one of the most important tasks before presenting a new product to the public. This is being done more and more nowadays, with charts and statistics, with spot-tests in key-towns, and for the moment at least, with more intuition and skill than science. May Professor Lewin's vector-theory diagrams, which I am applying today to a field entirely new to them, help the experts.

One of the elements necessarily included in the market-test is the price of the article to be sold, as it is the real pyschologieal barrier between the consumer and the merchandise. The story of the ball-bearing pen will give you many ideas both on timing and pricing.

The ball bearing pen, was invented about 15 years ago and first produced in South America during the war. An enterprising American got hold of it and produced the first and only real postwar gadget. It came out when there was nothing else to be had except cigarette lighters, and though we all know, that it writes better under water than on paper, fantastic amounts were sold at 12 dollars and 50 cents apiece in a package as pretentious as an expensive perfume. The manufacturer made so much money, that he does not lose sleep about the patent lawsuits he has against him, and the common stock of the only department store selling the pen shot far ahead of the others. By the time the other manufacturers got on the band-wagon the original one was underselling them and the present status of the great ball bearing pen sweep-stakes is 74 cents or 3 for $2.17.

I witnessed another skirmish of this battle in the famous department store. A few days before, an adver-

tisement offered 4 dollars for any fountain pen in any condition to be deducted from any ball bearing pen bought over 8 dollars. During the few minutes I wormed my way through the store between the pen counters, I heard three customers explain, that their broken pens not being worth a red penny, the store evidently cheats the customers, who did not keep their old fountain pens, out of 4 dollars on each sale. The harassed sales people were helpless, the more belligerent customers were led into the manager's office. Who was fired from the advertising department, I do not know. But I am pretty sure no merchandising man saw that ad before it was released.

I do not want this to be a reflection on all advertising departments and agencies, because most of them are very merchandising minded indeed.

Proof positive for this is the last pipe advertisement containing the "Select A Pipe chart, to determine scientifically and accurately the size and style of pipe best to fit the individual smoker, based on his physical appearance, his personality, and his smoking habits. Check the correct characteristics in the list below, enter the points in the column at right, and add . . . The total points correctly placed in table below the chart indicate the most satisfactory size . . ."

You check your build, your face, your chest (full, regular, straight, . . . I almost thought I was reading a bra ad) your nose, how you puff your pipe, your temperament, etc. There are three groups of drawings on one page, all in different styles and copy galore! The dream of the salesman and the curse of the art departments, between which there is a great battle raging.

The art departments would like to produce only beautiful pictures, the more earthly sales departments insist on displaying merchandise and description and praise and prices.

The artist lately succeeds very often. I want to mention the outstanding series of Container Corporation and some Airline ads, and quite a few of the perfume and make-up and fashion ads of the last years as examples of how little copy can sell an article with the help of a beautiful printed page.

Elizabeth Hawes says that fashion is spinach, but it is spinach which grows into several billions a year. No one knows who creates fashion or why, but the fact is that there is one, and that it changes ever so often in everything. It is unimportant that they (they are the unknown, who create the fashion) that they do not invent anything new and the same things come back, slightly changed, ever and ever, like an endless musical comedy chorus going around behind the stage or the different figures of a merry-go-round. Even children can spot them, though they would like to believe in illusions. But, to quote Miss Hawes again: "They" just go ahead and change the fashion again and say you can't have blue or you must have brown."

Cosmetic houses have been proving for many years, that the make-up you wear with blue cannot be worn with brown. Anybody with color sense will see the artistic truth in this, but it was Advertising House Inc.

Quality and uniformity of this purest grade of commercial zinc oxide are assured by nearly a century of zinc oxide manufacturing experience.

Exceptional whiteness, fineness and purity, coupled with its non-toxic, protective and mildly astringent qualities, make it an especially valuable pigment for pharmaceuticals. Its covering power and adhesive properties are ideal for cosmetics.

Have you tried The New Jersey Zinc Company's ZINC BORATE–3170?

Specify U.S.P. Zinc Oxide made by—

THE NEW JERSEY ZINC COMPANY

Products distributed by

The New Jersey Zinc Sales Company

New York · Boston · Chicago
Cleveland · San Francisco
Los Angeles

New! Outstanding!

AMERCHOL L-101

A LIQUID CHOLESTEROL EMULSIFIER PROVIDING UNUSUAL SKIN BENEFITS

NON-IONIC CHOLESTEROL in its most active and efficient form.

- Emollient, completely stable.
- For oil-in-water and water-in-oil creams, ointments and lotions.

AMERCHOL L-101 is one of many new Amerchols manufactured from specially processed Cholesterol and other sterols and will help you improve your products.

Our research laboratories are available to you for advice and information.

AMERICAN CHOLESTEROL PRODUCTS
Incorporated
MILLTOWN, NEW JERSEY
Sales Office—40 Exchange Place— New York 5, N. Y.

ATTENTION—PERFUMERS

Adjust Your Formulæ By Using Our

SUBSTITUTES of PROVEN MERIT

Hydroxy Citronellal
Geraniol
Citronellal
Rhodinol

AVAILABLE

Other Replacements for Aromatic Chemicals, Essential, and Flower Oils

SOAP and COSMETIC PERFUMES
INDUSTRIAL ODOR MASKS

SAMPLES ON REQUEST

SEELEY & CO., INC.

136 LIBERTY STREET NEW YORK 6, N.Y.

Factories & Warehouses
FARMINGDALE, L. I., N. Y. NYACK, N. Y.
LOS ANGELES, CALIF.

which really put it together into a logical presentation. As this is an excellent example of complete merchandising, I would like to show it to you in detail.

They did not have to invent a new product, because lips have been painted for six or seven thousand years. But the basic merchandising idea was to sell four lipsticks as a unit, instead of one. The package is not an ideal one, because available materials were still very scarce at the time of this promotion. But it is as practical, as any of the cosmetic bags on the market and is presented with an identifying leaflet visible through the cellophane envelope protecting it. No market testing was necessary, as the lipstick consumption figures are known to be expanding and what we wanted to reach is the expansive part: new customers. Timing coincided with fashion openings, as it was definitely a fashion conscious promotion. The price was carefully and attractively established slightly cheaper than the previous unit prices of the single lipsticks.

Promotions were planned coordinated with fabric houses and dress and accessory manufacturers, and publicity widely distributed. Madame Helena Rubinstein originated the whole idea and gave interviews to all leading fashion magazines. The beauty editors sensed that this was not an ordinary fashion color promotion, based on a new catchy name or on the success of a moving picture, but the story of a basic, sensible color coordination, which will be to everybody's advantage, and were most cooperative.

Displays and advertising were worked out as a unit and repeated on the individual leaflets, distributed in the store, by mail and in the package itself.

For wholesale distribution it was presented to buyers and beauty editors at the usual cocktail party with dresses, accessories and beautiful models wearing the appropriate colors, and a very complete scientific exposition of the principles of the color spectrograph and our color selection by an expert in the color field.

And then finally the lipstick quartet arrived in the retail store. Babied and nourished carefully along the line, it all of a sudden found itself on its own, trying to sell itself by its looks, its fame and its nursemaids, the demonstrators and salesgirls.

The situation then, in the form of vectors and barriers is represented by the diagram on page 626.

It would be wonderful if we could measure at least the relative strength of these different field forces. That would give us a really scientific instrument to predetermine the probable success or failure of a merchandising program. Now we have to rely on the magic touch and clever guessing of that wizard, the merchandising man, to evaluate these valences even the last of which, salesmanship, is as negligible.

Today, merchandise is put before the consumer in three different ways. From catalogues of the mail-order houses, America bought only about 600 million dollars worth of goods in 1945, from chainstores about 16 billion dollars, from independent stores about 60 billion. I am giving you these figures only to show you that the great majority of goods are still bought with the help

of your friend, the retail salesgirl or salesman. And I cannot over emphasize their importance.

This war is over, and the battles in front of store counters too. Between the sales person and the customer a new, diplomatic battle begins, in which only the intelligent, well informed and tactful seller can win. Manufacturers realize this, and in the cosmetic industry place their own salesgirls, the demonstrators in many stores, whose education is one of the most important points in the merchandising program.

But many billions of goods are sold without sales personnel too. I am not thinking primarily of Klein's basements bargains, but of supermarkets of all kinds, which begin to sell more than food. The package will become all-important in these stores, especially the transparent package, which will show for this particular field an enormous development. And the modern store is nothing but a gigantic transparent package.

The latest tendency in recessed shop facades invites the promenaders to step off the sidewalk stream without obliging them to enter the shop. Once out of the stream without effort, a full length glass panel shows them the whole store, with all the merchandise inviting them to take the next and in most cases, fatal step.

And now, that you have bought this important piece of goods, which I brought up from its conception to its grown-up life in your possession, please think sometime of all this care and worry and talent and thought and energy, which made it possible for you to buy it at all.

Amino Acids for Medicinal Uses

(Continued from page 708)

In addition, a parenteral product must be:

(a) Sterile

Sterility is usually accomplished by ultra-filtration using either Seitz pads or Berkefeld candles. Since heat greatly increases the combination and destruction of amino acids, especially in the presence of aldehydes such as glucose, it ordinarily is not used for sterilization.

(b) Non-antigenic

This requires complete removal of all unchanged protein and molecules large enough to be antigens. A good precaution to take in testing for antigenicity is to use animals sensitized to the parent protein as well as those which have been injected with the resulting hydrolysate.

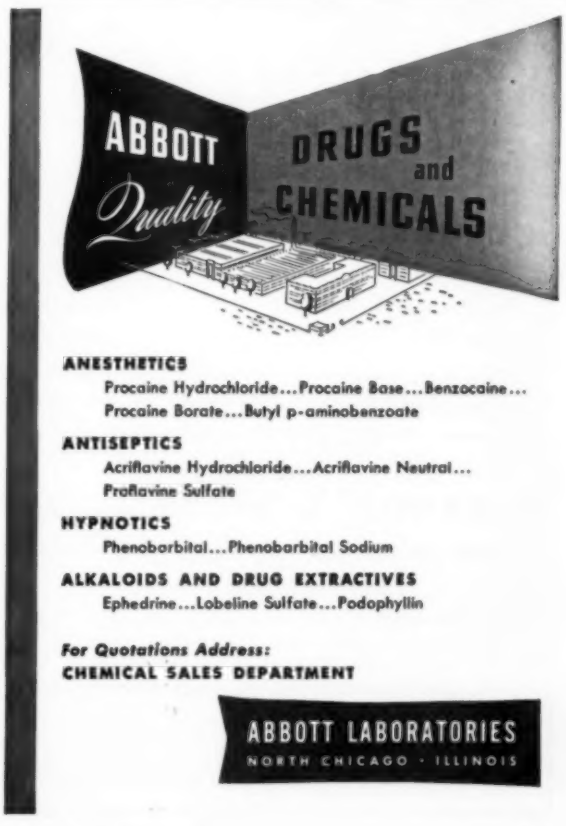
(c) Non-pyrogenic

The removal of pyrogens is extremely difficult, so that in practice the best procedure is to prevent their formation. The standard U. S. P. test for injectible solutions has proven satisfactory. Amino acid solutions passing this test have never given pyrogenic reactions clinically.

(d) Able to be administered at a reasonable rate without reactions

Whipple and co-workers[7] have shown that certain amino acid mixtures can be given much more rapidly than others, without side reactions. They pointed out that glutamic or aspartic acid added to a mixture which could be given rapidly increased the tendency to

NEW
POWERFUL
Larvacide for Moth Control
POLYCHLOR COMPOUND 1947
Entomological tests show the following results:
Live Larvae
Dead Larvae
Visual Damage
POLYCHLOR COMPOUND 1947 1 9 Negligible
Pure Paracichlorobenzene 10 0 Negligible
After a recovery period of 7 days:
POLYCHLOR COMPOUND 1947 0 10
Pure Paradichlorobenzene 10 0
It is evident from the above test results that POLYCHLOR COMPOUND 1947 is decidedly more effective in killing carpet beetle larvae than pure Paradichlorobenzene crystals.
AVAILABLE IMMEDIATELY IN CARLOAD AND LESS THAN CARLOAD QUANTITIES.
ORDER NOW.
FINE ORGANICS, Inc.
211 E. 19th St. New York 3, N. Y.
GRamercy 5-1030 Cable Molchem
(Technical Data on Request)
FINE ORGANICS, INC.
F.O.



CANADA

Old-established Manufacturing Firm with complete sales representation and branches across Canada, dealing directly with Drug, Department and Chain Stores, desires to contact manufacturers (other than Perfumes and Soaps) with a view to manufacturing and distributing their products in Canada.

On account of the extent of the Canadian territory with its few large cities, and otherwise sparse population, this plan for volume operations and lessened overhead should be mutually and financially advantageous. Strictly confidential.

Address—Manufacturer, P.O. Box 457
Montreal 3, CANADA

CHINESE ANISE OIL

CONSUMERS IMPORT CO., Inc.
Empire State Building New York 1, N. Y.
LOngacre 3-0415

CHEMICALS

GEORGE F. SMITH, INC.
60 East 42nd Street VAnderbilt
New York 17, N. Y. 6-3098

Founded 1854
FEZANDIE & SPERRLE, Inc.
205 Fulton Street, New York City
HIGHEST STANDARD
Colors and Dyes for Cosmetics, such as
LIPSTICKS PERFUMES
ROUGES LOTIONS
FACE POWDERS SHAMPOOS
MASCARA CREAMS
SOAPS Etc.
Your inquiries are invited

nausea. However, mixtures totally devoid of these amino acids will cause vomiting just as readily as some mixtures containing them. It is possible that mixtures of amino acids wherein the proportion of the amino acids comes near to the quantitative requirements for those amino acids will be better tolerated by the animal.

(e) Stable

A mixture of over 20 different compounds is bound to be difficult to stabilize, especially when the solubility of several of the constituents is less than the quantity present. Fortunately the least soluble amino acids are not among the essential ones. The problem, however, is further complicated by the slow decomposition of some amino acids at acid pH. As the pH is raised, the isoelectric point of many of the amino acids is approached causing precipitation. Also, since amino acids are excellent buffers, it takes considerable alkali to change the pH of a solution which contains excess quantities of the dicarboxylic amino acids. Such alkali adds to the ash content. It is questionable whether the pH should be raised to more nearly blood pH, thus decreasing the rate of decomposition of the amino acids, but greatly increasing the ash content and precipitation. Obviously a lower proportion of the acidic amino acids would shift the pH toward neutrality. Casein is usually used for the preparation of hydrolysates, and casein contains almost 30 per cent of dicarboxylic amino acids. The use of proteins lower in the acidic amino acids should result in a solution with higher pH without additional ash content.

The low solubility of several of the amino acids is a great problem. However, small peptides containing these amino acids are often more soluble than the amino acids themselves, so that stable solutions can be prepared. The utilization of such peptides will be discussed later.

The foregoing part of this discussion has been concerned with the characteristics of amino acid mixtures. Perhaps the simplest way to prepare a product to meet many of these specifications would be to make mixtures of synthetic and purified amino acids. However, there are at least two serious disadvantages at the present time to such a procedure.—One is economic,—The cost of purifying or synthesizing sufficient quanti-

AMPULS CALCIUM GLUCONATE
Guaranteed Stability
Large Quantities for Quick Delivery
Ask for Quotation
also
Complete Line of Standard and Specialty Injectables in Ampuls and Vials
Manufactured by
TORIGIAN LABORATORIES, INC.
QUEENS VILLAGE, N. Y.

ties is still very large. Also, there is mounting evidence that proteins contain an unknown factor, as reported by Rose and Womack[12], perhaps another amino acid, the constitution of which is not known; or a necessary linkage, as proposed by Wooley[14] which can't be synthesized by the animal at a rate commensurate with its needs.

(To be continued)

EYE GLASS CLEANING CLOTH: We wonder if you can give us a little help. We seek a glass polishing cloth, one that can be used for cleaning and polishing eye glasses. We would like to have a simple, effective formula, if you can locate one, that does not involve elaborate apparatus. We plan to use flannel remnants.

This of course is a bit out of our line. However, a comprehensive review of glass cleaning compositions including methods for making glass polishing cloths, appeared in the January 1945 issue of *Soap and Sanitary Chemicals*. Additional information will be found in the Government publication "Anti-Dimming Preparations for Glass Surfaces," Letter Circular LC414, Department of Commerce, National Bureau of Standards, Washington, D. C. This is available on request.

A rather simple formula for making a glass polishing cloth, calls for:

Glycerine	**1 oz.**
Sodium oleate (soap)	**1 oz.**
Water	**5 qts.**

Boil ingredients together for five minutes. Then immerse suitable cloths in boiling solution for ten minutes. Dry without wringing.

Manufacturers of

Aromatic Chemicals

and

Perfume Compounds

gunning and gunning inc.

601 WEST 26th STREET, NEW YORK 1, N. Y.

VERSATILE

Private Label Cosmetic Manufacturer

Modern equipment for creams, lotions, powders, toilet waters and perfumes.

We have a successful record in creating ideas, formulas and packages.

We invite a few selected additional accounts.

AMIE PRODUCTS, INC.

131 Water Street New York 5, N. Y.

BOwling Green 9-4961-2

MOULDS

for

LIPSTICKS
MASCARO
SUPPOSITORIES
STYPTIC PENCILS

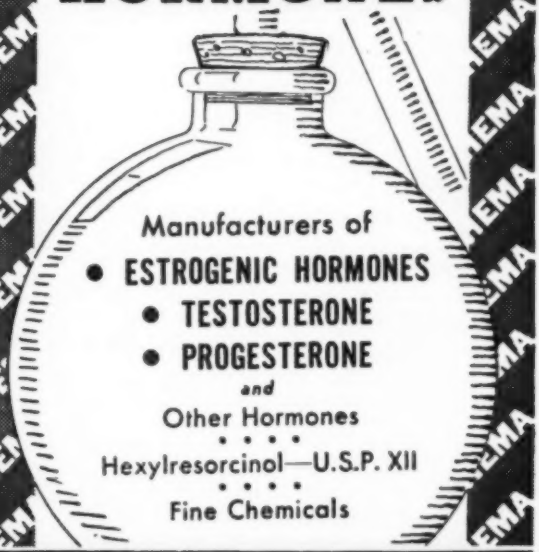
and DIES for ROUGE
COMPACT POWDER

Write for Catalog

A. CAVALLA, INC. 163 WEST 18TH STREET, NEW YORK, 11, N.Y.

HEMA HEMA HEMA HEMA HEMA HEMA HEMA

HORMONES



Manufacturers of

- ESTROGENIC HORMONES
- TESTOSTERONE
- PROGESTERONE

and

Other Hormones

• • • •

Hexylresorcinol—U.S.P. XII

• • • •

Fine Chemicals

HEMA DRUG CO., inc.

Manufacturers of rare chemicals

66-38 CLINTON AVE. MASPETH, NEW YORK

Tel. NEWTOWN 9-2110

Professional Service

THE COLUMBUS LABORATORIES
Analytical and Consulting Chemists
Bacteriologists
We have been solving problems pertaining to foods, drugs and cosmetics since 1893.
33 N. STATE ST. CHICAGO, ILL.

H. A. Seil, Ph.D. E. B. Putt, Ph.C., B. Sc.
SEIL, PUTT & RUSBY, Inc.
Analytical and Consulting Chemists
Formerly Experts for U. S. Dept. of Agriculture
Analyses Made — Formulas Developed
Research Investigations Conducted
Specialists in the Analysis of
Beverages — Essential Oils
Flavoring Extracts — Toilet Preparations
Foods — Spices — Drugs
Proprietary Medicines — Special Formulas
Pyrethrum, Rotenone and other Organic Insecticides
Lab's: 16 East 34th St. New York, N. Y.
Telephone MUrray Hill 3-6368

Consult
Z. H. POLACHEK
Reg. Patent Attorney
1234 BROADWAY (At 31st)
New York 1, N. Y.
Phone: LO. 5-3088

GEORGE W. PEGG, PH. C.
Consultant
Drugs — Cosmetics — Industrial Alcohol
Flavoring Extracts
Labeling — Formulas — Processes
152 West 42nd St., New York 18, N. Y.
Telephone Wisconsin 7-3066
Washington Address: 2121 Virginia Ave., N.W.
Washington 7, D. C c/o Dr. George W. Hoover

*ARLINCO RESEARCH LABORATORY, INC.
Research, Formulation and Application to the Industry.
Ethical Pharmaceuticals, Drugs, Cosmetics and Perfumery.
333 W. 52nd St., New York 19, N. Y.
Circle 6-7924
* A-R-L-inco means: Applied Research Laboratory, Incorp.

MARKET RESEARCH
on Chemical Products
BJORKSTEN RESEARCH LABORATORIES
185 North Wabash Avenue
Chicago 1, Illinois
ANDover 1726

DRUG and COSMETIC BOOKS!
We can supply any book in any language in the chemical and technical fields.
ABERDEEN BOOK CO.
65-69 Fourth Ave., New York 3, N. Y.
ORchard 4-0353

Classified

Machinery for Sale

EVERYTHING UNDER ONE ROOF: Engineering service and consultation; warehouse, machine shops, offices; largest index of available equipment in the country. Comminuting Machines, 25 Fitzpatrick, Model D, Stainless. Hammermills and Grinders. Sterilizers or Retorts, New and used; vertical and horizontal. Filter Presses, Wood, Iron, Aluminum; all sizes; open and closed delivery. Filling Equipment, for dry materials, juices, liquids, and viscous materials. Dryers, Steam gas, or electrically operated. Kettles and Tanks. Prompt shipment, new, stainless, all sizes. Packaging Equipment. Labelers for spot or wrap-around labeling; semi or fully automatic. Wrapping and cartoning equipment. Tablet Machines, Stokes, Stokes & Smith, Colton, etc. "First" pays fair prices for your used equipment. First Machinery Corp., 157 Hudson St., New York City 13.

FOR SALE: 6 Mikro Pulverizers, Bantam & 18I; 1—Karl Kiefer Vari-Visco Filler; 17—Stokes Single and Rotary Tablet Machines, from ½" to 2½"; 10-12" Belt Conveyors, 10' to 50'; 6—New 1000 and 2000 Lb. Powder Mixers; 8 Stainless Steel Kettles, 60, 80, 100, 150, 300 gal.; 12—Stainless Steel Tanks, 100 to 1500 gal.; Powder and Liquid Filling Machines; Burt, World, National Can and Bottle Labelers; Filters; Pumps; etc. Complete Bulletin on request. We buy your surplus equipment. BRILL EQUIPMENT COMPANY, 225 West 34th Street, New York 1, N. Y.

FOR SALE: One new uncrated Stokes No. 90D Automatic tube filling, closing and sealing machine. For full description write World's Products Company, Spencer, Indiana.

FOR SALE: 2—Anderson No. 1 Oil Expellers; 10—Sperry 32" Iron Filter Presses; 2—Devine No. 2 Vac. Shelf Dryers Elec. Heated; 4' x 9' Atmos. Drum Dryer; 75-36" x 36" Cast Iron Filter Press Plates; 2—Baker Perkins 20 & 100 gal. Jack. Mixers; 4—Rotex Sifters 20" x 81" three deck; 2—Stokes RD4 Rotary Tablet Machines 1-3/16"; Colton No. 2 Rotary ⅝"; Stokes RBB Rotary ½"; Stokes No. 149B High Vacuum Pump; New 40 gal. Pony Mixers; New Stainless Steel Tanks 100 to 1000 gals.; Stainless steel, Alum., & Copper Jacketed Kettles, 40 to 375 gals., New Portable electric Agitators ¼ to 2 HP.; 2000 lb. steel Powder Mixer; 9 to 250 gal., single & double arm, heavy duty, horiz. Mixers; Paste Powder & Liquid Mixers; Kettles & Tanks; Grinders, Crushers & Pulverizers; Sifters & Screens; Stills & Columns; Filters & Filter Presses; Dryers; Centrifuges; Pumps; Water Stills; Blowers; Roller Conveyor. We buy your surplus equipment. STEIN EQUIPMENT CO., 426 Broome St., New York 13, N. Y.

FOR SALE: 2—Stokes & Smith Model G-1 Powder Fillers; 4 Copper Coating Pans 24", 30"; 4 Weeks McDonald Automatic Labellers, 1 World Semi-Automatic Labeller; 1 Capem 4 Head Automatic Capper; 1 Pneumatic Scale 6 Head Automatic Capper; 1 Sanco Semi-Automatic Vacuum Filler; 1 U. S. 8 spout Syphon Filler S. S.; 22 S. S. Tanks 60, 100, 200 Gal.; 11 New S. S. Kettles 100, 150, 200 Gal., 50 Copper Kettles, 25 to 300 Gal.; 2 K. K. 72 Stem Rotary Bottle Rinsers; 6 Colton No. 2 Rotary Tablet Machines; 1 Stokes RD4 Single Punch Tablet Machine; 1 Ertel 6 Disc Filter, 12" dia.; 2-25' Belt Conveyors 12" belt and 10" workboards; ¼ and ½ Hp Ex. Pf. Portable Agitators. What have you for sale? Send for latest bulletins. Machinery & Equipment Corp., 533 West Broadway, New York 12, N. Y.

Portable power stackers and conveyors; floor to floor conveyors; Vibrating Screens; Roll Crushers. Immediate Shipment. Bonded Scale Company, Dept. DC, Columbus 7, Ohio.

One Miller Heavy Duty Wrapping and Sealing Machine, Model MPS-1RG complete with 110 volt AC motor, thermostatic heat controls, spot sealers, sheeting attachment, one running glue line and provision for handling bottles. Excellent condition. Box MA-8, DRUG & COSMETIC INDUSTRY.

FOR SALE: Completely rebuilt and guaranteed Viscolizers and homogenizers. Can furnish with standard or late type stainless sanitary heads and pressure valves. Bulletin and prices on request. Otto Biefeld Co., Watertown, Wisconsin.

Machinery Wanted

HIGHEST PRICES PAID FOR GOOD EQUIPMENT. FIRST MACHINERY CORPORATION, 157 Hudson St., New York 13, N. Y.

Machinery Wanted

GET MORE FOR YOUR SURPLUS EQUIPMENT: List it with our bureau and sell directly to the next user. 50,000 manufacturers get our offerings regularly. They need such units as Fillers, Mixers, Labelers, Tablet Machines, Pharmaceutical Equipment, or what have you to sell. For quicker action and better price, send full details and your price to Equipment Finders Bureau, 6 Hubert St. New New York 13, N. Y.

WANTED, still 5 gallon internal capacity, for plant and leaf distillation, tin plated copper, monel or stainless steel, without agitator, employing direct electric heat, MA-2, DRUG & COSMETIC INDUSTRY.

Help Wanted

EXCELLENT opportunity for man who has a following in the Drug, Cosmetic and Chemical Line to secure packaging work or contracts for bottle filling and labeling; also tube filling. Very interesting offer. Write Box MA-3, DRUG & COSMETIC INDUSTRY.

WANTED—Control Chemist experienced in Pharmaceutical assay. Forty hours a week. Box MA-4, DRUG & COSMETIC INDUSTRY.

WANTED to establish and supervise Control Laboratory and for research on new Pharmaceuticals and Biologicals by large nationally known Chicago manufacturer in this field. Box MA-5, DRUG & COSMETIC INDUSTRY.

PRODUCTION MANAGER for face powder and rouge manufacture. Must have at least ten years experience. Write full details. Box MA-7, DRUG & COSMETIC INDUSTRY.

Business Opportunities

WILL PURCHASE for cash all your reformed, reconditioned, obsolete and surplus stocks of bottles, jars or caps for immediate shipment. Canal Industries, Inc., 122 South Michigan Ave., Chicago 3, Illinois.

ENGLISH COSMETICS. The Managing Director of a leading English Cosmetic House will be visiting America shortly with the object of appointing a sole distributor. This agency offers wide scope to an energetic distributing organization, and fullest co-operation is assured. Write giving fullest particulars of trade connections and territorial coverage to, "Cosmetics" c/ Arthur Knight Co. Ltd., 20 Blackfriars Lane, London, E. C. 4 Eng. All replies will be treated in strictest confidence.

SELL NOW! Prices are high! Wanted: Chemicals, Dyes, Drugs, Oils, Pharmaceuticals, Solvents Residues, By-Products-Wastes. Chemical Service Corp., 84 Beaver St., New York 5, N. Y.

MANUFACTURER'S Representative want lines for West Coast to sell manufacturers, bottles, caps, boxes, perfume oils, machinery, etc. Twenty-five background in manufacturing. Graduate Chemist. Excellent contacts in trade. Full time line considered. Address replies Box MA-1, DRUG & COSMETIC INDUSTRY.

FILLING-LABELING-PACKAGING — Services for both bottles and tubes. Complete warehousing and shipping facilities with railroad siding. Barish, Inc., 2 Oak St., East Rutherford, N. J.—Telephone Rutherford 2-9150.

CONSULTING LABORATORY for the manufacture of cosmetics, pharmaceuticals, etc. Dr. H. Salfield, 19 Valley Road, White Plains, N. Y.

LONG established, reliable, competent Cosmetic Manufacturer and Perfumer, Middle-East, 17 years experience, good knowledge American formulation, technique and raw materials, offers his services to American firm wishing to expand her activities in Sterling Aerea. Box MA-6, DRUG & COSMETIC INDUSTRY.

SALES AGENCY with Fifth Avenue showroom and offices interested in few outstanding selected lines or items for distribution to toiletries or drug manufacturers, wholesalers and retailers of cosmetic and drug trade. Box MA-9, DRUG & COSMETIC INDUSTRY.

COMPLETE filling, labeling, packaging service. Liquids, powders, creams. Large or small quantities. Also bulk or packaged flavoring extracts. Submit full particulars for quotations. Hindman Products, Inc., Dept. MBA, Morgantown, W. Va.

OFFERING a quantity of the best Iranian Rose buds at a reasonable price. Pan-Orient Trading Company, 68 William Street, New York 5, N. Y.—Telephone: Bowling Green 9-0530.

Specialization Counts*

BERNARDIN
Metal Closures

*Since 1881—
America's First Manufacturer
of Metal Closures

BERNARDIN BOTTLE CAP CO., EVANSVILLE, INDIANA

falba
Reg. U. S. and Foreign Countries
ABSORBS 5 TIMES ITS WEIGHT OF WATER
THE ORIGINAL ABSORPTION BASE
Write for suggested formulae
Pfaltz & Bauer, Inc.
EMPIRE STATE BLDG., NEW YORK 1, N. Y.

For Butter Type Flavors
Acetyl Methyl Carbinol (Acetoin)
Acetyl Butyryl, Acetyl Valeryl
Diacetyl

For Pineapple Imitations
Allyl Caprylate Allyl Heptylate

FAIRMOUNT CHEMICAL CO., Inc.
Manufacturers of Flavor and Perfume Chemicals
600 Ferry Street NEWARK 5, N. J.

SEYDEL

BENZOIC ACID U. S. P. and Tech.
BENZYL ALCOHOL F. F. C.
BENZYL BENZOATE 98-100%
ETHYL AMINO BENZOATE U.S.P.
SODIUM BENZOATE U.S.P.
TERPIN HYDRATE U.S.P.

Booklet describing "Seydel" fine chemicals available on request.

SEYDEL CHEMICAL COMPANY
Established 1904 JERSEY CITY 2, N.J. Cable Address "SIZOL"

"Cachalot" fatty alcohols are better for your formula.

CETYL, OLEYL and STEARYL

Send for data sheets:

M. MICHEL AND COMPANY, INC.
90 BROAD STREET • NEW YORK 4, N. Y.

GUMS

TRAGACANTH
QUINCE SEED ARABIC KARAYA
GALL NUTS

D. S. DALLAL & CO.
261 Fifth Ave., New York 16
IMPORT MUrray Hill 3-8646 EXPORT

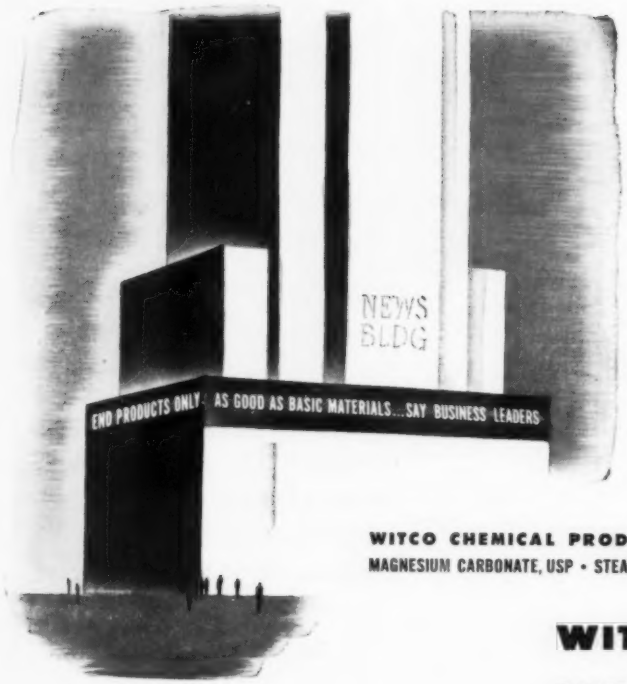
CERTIFIED COSMETIC COLORS
Also
COSMETIC Inorganic Pigments
SUBMIT YOUR INQUIRIES
INTERSTATE COLOR CO., INC.
7 Beekman Street New York City

MERITA
LAMBSWOOL PUFFS

. . . are preferred wherever fine packages are prepared. Any size or shape for face and bath powder, compacts and rouge.

Write For Details To

MERITA, INC. 25 SPRUCE STREET NEW YORK 7, N. Y.



Witco basic products are developed and produced through a program of research, pilot plant investigation and scientific manufacturing methods. As a result, the finished products made with Witco materials . . . by their outstanding performance . . . will effectively meet the highly competitive, hard-selling era that lies ahead.

If you have a basic-materials problem in any of your products, Witco's modern technical service and research facilities can give you reliable assistance. And we shall be glad to send you literature and samples at your request.

WITCO CHEMICAL PRODUCTS FOR THE DRUG & COSMETIC INDUSTRY

MAGNESIUM CARBONATE, USP • STEARATES, USP • MAGNESIUM OXIDE, USP • ZINC OXIDE, USP • STEARIC ACID

WITCO CHEMICAL COMPANY

MANUFACTURERS AND EXPORTERS

295 MADISON AVENUE • NEW YORK 17, NEW YORK

BOSTON • CHICAGO • DETROIT • CLEVELAND • AKRON • LOS ANGELES
SAN FRANCISCO • LONDON AND MANCHESTER, ENGLAND

ADVERTISING INDEX

Abbott Laboratories 723
Advanced Cosmetics, Inc 662
Albek, Inc., Albert 710
Alsop Engineering Corp 676
American Cholesterol Products, Inc 722
Amie Products, Inc 725
Anchor-Hocking Glass Corp. Insert facing 644; 648
Anderson Bros. Mfg. Co 682
Andresen, J. C 710
Armstrong Cork Co ..... Insert facing 652
Aromatic Products, Inc ..... Insert facing 601
Atlas Powder Co 596
Baker Chemical Co., J. T ..... Insert facing 660
Barnett Company, Samuel 654
Bendix Chemical Corp 702
Bernardin Bottle Cap Co 727
Braun Company, W 652
Broder Industries, Inc 647
Brown Bag Filling Machine Co 678
Burke Company, Edward S 700
Bush & Co., W. J 702
Calco Chemical Division 593
Calif. Fruit Growers Ex... Insert bet. 604-605; 704
Carbide & Carbon Chemical Corp. Insert facing 616
Carr-Lowrey Glass Co 646
Cavalla, Inc., A 725
Chem-Arom Co., The 694
Chemical & Process Machinery Corp 670
Chiris Co., Inc., Antoine 609
Colton Co., Arthur 678
Consumers Import Co., Inc 724
Continental Can Company 649
Crown Cork Specialty Corp ..... Insert facing 668
Dallal & Co., D. S 727
Danco, Inc., Gerard J 691
Devold Oil Co., Inc., Peder 687
Dodge & Olcott, Inc ..... Insert facing 605
Dodge Cork Co 666
Dow Chemical Co ..... Insert facing 593
Dreyer, Inc., P. R ..... Insert facing 688
Duche & Sons, T. M 707
Drug Products Co., Inc 707
Dunkel & Co., Inc., Paul A 691
du Pont de Nemours & Co., E. I ..... Insert facing 692
Durlin Corp ..... Insert between 616-617
Emery Industries, Inc ..... Insert between 612-613
Eppenbach, Inc 680
Ertel Engineering Corp 680
Essential Aromatics Corp 608
Evans Chemetics, Inc 605
Ever Ready Label Corp 668
Exact Weight Scale Co 676
Fairmount Chemical Co 727
Felton Chemical Co., Inc ..... Insert between 600-601
Fezandie & Sperrle, Inc 724
Filter Paper Co 677
Fine Organics, Inc 723
Firmenich & Co., Inc ..... Insert facing 613
Florasynth Labs., Inc ..... Insert between 612-613
Foster-Forbes Glass Co 642
Fritzsche Bros ..... Insert between 696-697
Furlager Mfg. Co 655
Gardner-Richardson Co ..... Insert between 656-657
General Chemical Company ..... Insert facing 592
General Drug Co 704
Givaudan-Delawanna, Inc. Insert bet. 596-597; 700
Greeff & Co., R. W 704
Gunning & Gunning 725
Hagerty Bros. & Co 682
Hazel-Atlas Glass Company ..... Insert facing 656
Helfrich Labs., Inc ..... Insert facing 597
Hema Drug Co., Inc 725
Herchelroth, J. Hilary 718
Heyden Chemical Corp ..... Insert between 600-601
Hinde & Dauch Paper Co.. Insert between 652-653
Hoffmann-LaRoche, Inc 698
Hooker Electrochemical Co 610
Hormann & Co., F. R 679
House of Hollywood 694
Huisking & Co., Inc., Chas. L 687
Illinois Water Treatment Co 717
Industrial Chemical Sales ..... Cover 2
Inland-Alkaloid Co 707
Innis-Speiden Co 612
Interchemical Corporation 690
Interstate Color Co., Inc 727
Intramed Co., Inc 706
Jelly & Co., Walter H 706
Kachurin Drug Co 686
Kalva Corporation, The 704
Katz & Co., Dr. Alexander 608
Kelton Cosmetic Co 712
Kessler Chemical Co ..... Insert facing 689
Kimble Glass Co ..... Insert facing 673
Knox Glass Associates, Inc ..... Ins. bet. 652-653
Kohnstamm & Co., H ..... Insert facing 693
Kolmar Laboratories ..... Insert facing 600
Koster-Keunen Mfg. Co., Inc 687
Kraft Foods Company 613
Lanatex Products Sales Co 707
Lautier Fils 695
Lemke & Co., B. L 706
Lueders & Co., George 602
Lusteroid Container Co 654
Magnus, Mabee & Reynard, Inc 595
Mallinckrodt Chemical Works ..... Insert facing 617
Maryland Glass Corp ..... Insert between 656-657
Mathieu, Inc., Charles 690
Merck & Co., Inc 601
Merita, Inc 727
Metal Glass Products Co 679
Michel & Company, Inc., M 727
Miranol Chemical Co., Inc 715
Monsanto Chemical Co ..... Insert facing 604
Monsanto Plastics ..... Insert facing 645
Moutet, J. Henri 720
National Can Co 656
Naugatuck Aromatics 600
Neumann, Buslee & Wolfe, Inc 706
New England Collapsible Tube Co 589
New Jersey Zinc Co 721
N. Y. Quinine & Chemical Works 591
Norda Essential Oil & Chemical 590
Orbis Products Corp 607
Oxzyn Company 592
Package Machinery Co 638
Palm Fechteler & Co 652
Palmers, Limited 724
Parento Co., Compagnie... Insert between 616-617
Paris Cosmetics, Inc 611
Parson Imports, M. W 686
Penick & Co., S. B 658
Pennsylvania Glass Products Co., Inc 648
Pennsylvania Refining Co 711
Perl-Oussani Machine Mfg. Co 678
Pfaltz & Bauer Co., Inc 727
Pfizer & Co., Inc., Chas ..... Cover 4
Pittsburgh Lectrodryer Corp 674
Plaskon Division (Libby-Owens-Ford) 653
Pneumatic Scale Corp., Ltd ..... Insert facing 669
Polak's Frutal Works ..... Insert facing 596
Polak & Schwarz, Inc 604
Potdevin Machine Co 678
Powell & Co., Inc., John 695
Prentiss & Co., R. J 713
Private Label Cosmetic Co ..... Insert facing 612
Remus & Co., Inc., Edward 711
Richford Corp 668
Ritchie & Company, W. C ..... Insert facing 653
Robert, Inc., Henri 603
Robinson Wagner Co 598
Rodgers Company, Inc., George G 680
Ross Co., A. H ..... Insert facing 672
Roure-Dupont, Inc ..... Insert facing 661
Santonine Company of America, Inc 687
Savon Products Company 682
Schimmel & Co., Inc 597
Seeley & Co., Inc 722
Seydel Chemical Co 727
Smith, Inc., George F 724
Standard Cap & Molding Co., Inc 651
Standard Pharmacal Co 694
Stanton Laboratories 719
Stokes Machine Co., F. J 670
Strong, Cobb & Co., Inc 594
Sturge, Ltd., John & E 616
Swindell Bros., Inc 650
Synfleur Scientific Labs ..... Insert facing 709
Thurston & Braidich 700
Tombarel Products Corp 716
Torigian Laboratories, Inc 724
Totus Mfg. Co., Inc 640
Trade Mark Record Book 614, 615
Ungerer & Co., Inc ..... Cover 3
Union Carbide & Carbon Corp.. Insert facing 616
U. S. Bottlers Machinery Co 677
U. S. Industrial Chem. ..... Insert between 664-665
van Ameringen-Haebler, Inc.. Insert bet. 592-593
Vanderbilt Co., R. T 702
Van Dyk & Co ..... Insert facing 708
Verley & Co., Albert ..... Insert between 684-685
Vorac Company, The 702
Warner Brothers Co ..... Insert facing 657
Warwick Chemical Company ..... Ins. bet. 604-605
Welch, Holme & Clark, Inc 714
Weston International Corp ..... Insert facing 649
Whittaker, Clark & Daniels, Inc. Ins. bet. 608-609
Wigton-Abbott Corp 682
Will & Baumer Candle Co 711
Witco Chem. Co., Frank Stearate Div 728
Wolf & Co., Jacques 694
Zimmerman Incorporated, W. F 606